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Exploring the Relationship between Images and Text in the Picture Book “Rosie’s Walk” and Its Educational Value

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Abstract: The classic picture book “Rosie’s Walk,” crafted by the renowned British author Pat Hutchins, exemplifies the well-known saying that ‘within every picture book lies at least three narratives.’ Hutchins adeptly harnesses the immediacy of imagery and the succinctness of language to construct a story universe that is simultaneously instructive and captivating. This paper presents an analysis of “Rosie’s Walk,” highlighting the intricate fusion of visual elements and written narrative within the sphere of children’s literature, and elucidating how this synthesis engenders such a narrative style. Also, it delves into the pedagogical significance of this picture book.

Keywords: children’s literature; picture books; “Rosie’s Walk”

1. Introduction

“Rosie’s Walk” is a representative picture book, renowned for epitomizing the theory that “every picture book contains at least three stories: the story told by the text, the story suggested by the pictures, and the story that arises from their combination.^[1]” This work is not only Hutchins’ debut but also her breakout piece, having since been translated into over a dozen languages. Hutchins’ style in creating picture books is famous for its expressive simplicity in images and minimal use of text. This unique artistic approach has made her work stand out in the field of children’s literature.

2. Story Overview and Artistic Style

2.1. Rosie’s Carefree Walk and the Fox’s Series of Failures

The plot of “Rosie’s Walk” is simple yet captivating. The protagonist, Rosie the hen, takes a leisurely stroll around the farm. However, the drama of the story lies in the appearance of a fox, which stealthily follows Rosie, attempting to catch her. As the story progresses, the fox continually tries but fails each time due to various accidents and its own clumsiness. From being hit by a rake on the ground, accidentally slipping into a pond, intending to pounce on Rosie but inadvertently falling into a haystack, then taking a “flour bath”, to the persistent fox ultimately crashing into a beehive and being chased away by bees... Each failure of the fox adds a humorous element to the story^[2]. Meanwhile, Rosie seems completely oblivious to the series of dramatic events happening behind her. Her carefree demeanor contrasts sharply with the fox’s embarrassment and comical misadventures.

2.2. Skillful Color Coordination and Character Design

In picture books, colors often complement each other to achieve the best visual presentation. Among the three elements of color, this book is particularly thoughtful and distinctive in its choice of hue. The book employs a highly unified warm color scheme, with large areas of bright yellow creating a warm and cheerful atmosphere for the story. Here, the use of color is not merely for aesthetics; they largely reflect the emotions and ambiance of the story.

In terms of character design, Hutchins also demonstrates her talent. The image of Rosie the hen is both simple and recognizable. Her head-held-high, worry-free demeanor perfectly embodies an innocent quality. In contrast, the design of the fox is more cunning yet humorous, its expressions and actions are full of drama, clumsy yet determined to “not give up until it catches Rosie”. This not only enhances the fun of the story but also makes the contrast between the characters more vivid.

3. The Relationship Between Images and Text

3.1. The Role of Images: Narrating Silent Stories

In “Rosie’s Walk,” images serve not only as narrative tools but also as the soul of the story. The uniqueness of this picture book lies in its profound utilization of images, surpassing the traditional auxiliary role of illustrations to become the primary narrative medium. The rich information and subtle emotions conveyed by the images provide multiple layers of interpretation for the story.

Firstly, each illustration of it resembling a carefully designed stage where the background, characters, and even the use of light and shadow silently narrate the story. For example, when Rosie the hen strolls peacefully through the quiet fields, the warm tones and natural layout of the background create a serene and harmonious atmosphere. Meanwhile, the following fox, with its sneaky posture and slightly dim colors, cleverly hints at the upcoming amusing plot. This visual contrast not only enhances the dramatic effect of the story but also allows children to intuitively feel the emotional changes in the story. Moreover, images play a crucial role in advancing the plot, with many key plot twists and climaxes presented through visuals. For instance, every attempt and failure of the fox is vividly depicted through a series of actions and expressions. This not only makes the story more compact and coherent but also provides children with an intuitive way to interpret the story.

3.2. The Scarcity of Text: The Art of Concise Language

In “Rosie’s Walk,” the text is extremely concise, with only 32 words appearing^[3]. However, the meaning and function carried by this concise text are very significant. The use of limited text is a characteristic of Hutchins’ creation and an important artistic feature of this work. Each word and sentence are carefully chosen, making these texts not only carriers of information but also tools for conveying emotions and deeper meanings.

Each sentence, though brief, is rich in meaning. Combined with the images, they construct a multi-dimensional story world. This strategy of scarce text usage makes each word exceptionally important, and each sentence requires the reader to think deeply and interpret. The text in the picture book may simply describe Rosie’s actions, but when combined with the images, these words can guide readers to imagine the situation behind the story or feel the emotional state of the characters. Besides, the scarcity of text to some extent also increases the openness and multiple interpretations of the story. Due to the lack of detailed textual descriptions, readers need to rely more on their imagination and understanding to fill in the details of the story, and thus it makes reading a unique experience and insight.

3.3. The Complementary Relationship Between Images and Text: Jointly Advancing the Story

In “Rosie’s Walk,” the parallel narrative of images and text forms a unique narrative strategy, making this picture book visually appealing and effective in conveying deeper meanings. The fox, as an entity with an equally important role as Rosie the hen in the picture book, leaves no trace in the text. The story actually introduces the fox from the beginning. What appears as a leisurely and ordinary walk from Rosie’s perspective is a thrilling chase in the eyes of the fox. Of course, we cannot perceive the latter’s excitement from the text. Half of the story is hidden in the images, requiring observation to discover the interesting aspects.

Images in the story provide an intuitive visual scene, making the plot lively and easy to understand as well as guiding readers to feel the development of the story. Meanwhile, the text plays a role in shaping the emotional context of the story. In this book, the text is used to emphasize and supplement the information conveyed by the images, making the emotional layer and deeper meanings of the story more clearly presented^[4]. The combination of text and images not only enriches the story but also makes it appealing to readers of different age groups.

4. Educational Value Under the Joint Narrative of Images and Text

4.1. Promoting Children’s Cognitive Development

The combination of images and text has a significant impact on children’s cognitive development, especially in cultivating their ability

to understand stories. As an intuitive form of expression, images can help children understand the plot and character behaviors more quickly. In this picture book, the vivid and colorful images enable children to understand the basic plot of the story through visual elements, even at stages where their reading ability is not fully developed. In addition, images can stimulate children's imagination and creativity, allowing them to construct a complete picture of the story in their minds. The text, although scarce, provides key context and emotional color, helping children to deeply understand the deeper meanings of the story. This combination of images and text not only enhances children's visual interpretation skills but also promotes their language comprehension and emotional cognition.

4.2. Enhancing Artistic Observation and Imagination

By combining images and text, Hutchins' work provides a new dimension for children's reading. The clever integration of humorous elements, such as the various failures the fox constantly encounters, creates a relaxed and enjoyable reading atmosphere. These humorous scenes not only attract children's attention but also allow adult readers to appreciate the wisdom and fun within. Furthermore, with extremely concise text, this silent narrative style requires readers of the picture book more actively in the interpretation of the story, imagining the progress of the story through observing the details of the images. This narrative style not only helps children make new discoveries in each reading, exercising their visual recognition abilities, but also promotes the development of their artistic appreciation and imagination.

4.3. Cultivating kids' Interest in Reading

The interaction between images and text also plays a role in cultivating kids' interest in reading. In "Rosie's Walk," the combination of engaging images and concise text provides children with a pleasurable reading experience. The vivid illustrations can immediately capture children's attention, sparking their curiosity to explore the story. As children notice the text during their reading, they begin to learn how to combine images and text to gain a deeper understanding of the story. This blend of visual and textual elements not only makes reading more enjoyable but also helps children progressively develop reading skills, transitioning from simple image interpretation to more complex text comprehension^[5]. In this way, picture books can foster a love of reading in children, laying a solid foundation for their future reading habits.

5. Conclusion

In conclusion, "Rosie's Walk" sets a high standard for children's literature with its special art form. Future children's literature is likely to emphasize the interaction between images and text more, exploring how to use this interaction to convey stories and educational concepts more effectively. Also, with the advancement of digital technology and the evolution of early childhood education concepts, this form may incorporate more interactive elements and multimedia technologies, offering a richer reading experience.

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Challenges of the Cooperation Between China and ASEAN in the Digital Belt and Road Initiative

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Abstract: With the rapid development of digital economy, digital economy cooperation between China and ASEAN is becoming more and more important. However, in the process of cooperation between China and ASEAN, there are also problems such as the large gap in the level of digital economy development among countries, the external challenges brought about by the great power competition, the South China Sea dispute and other problems. This paper aims to analyze the challenges faced by China and ASEAN in the development of digital Belt and Road cooperation through literature analysis and comparative methods, and tries to put forward corresponding countermeasures and suggestions to help make the bilateral cooperation of digital economy better so that the fruits of digital economy will benefit more people.

Keywords: China-ASEAN, digital “Belt and Road”, digital economy

1. Challenges for China-ASEAN cooperation on the digital Belt and Road

Although China and ASEAN have cooperated for a long time since the last century, the joint development of digital economy is still considered as a challenge for all countries, especially in the face of some problems such as the large gap in digital economy development among the countries within ASEAN and between ASEAN and China, the lack of digital governance capability, the lack of digital talents, and the external challenges brought about by superpower games, which makes China-ASEAN digital “Belt and Road” cooperation full of challenges and uncertainties.

1.1 big gap in the Development of Digital Economy

As ASEAN undertakes its new digital economic transformation, China is already far ahead. China has seized the opportunity of the fourth industrial revolution and vigorously promoted the development of digital economy at home. As for global digital governance, China holds high the banner of peaceful development, adhere to the Belt and Road Initiative, and continued to deepen international cooperation on the basis of ancient Silk Road. In the context of globalization and accelerating global digital transformation, China has combined digital economy with the Belt and Road Initiative and proposed the “Digital Silk Road”, adhered to innovation-driven development, strengthened cooperation among countries along the Belt and Road in digital economy and artificial intelligence, and promoted big data, cloud computing, and the construction of smart cities, and strive to enable these countries to share the fruits of digital development. While the digital economy of China is developing rapidly, the overall digital level of ASEAN is still low, which shows that not only the development of ASEAN is unbalanced, but there is also a big gap between ASEAN and China in digital economy, and the digital governance capacity needs to be further improved.

To develop digital economy, high-quality talent is an indispensable part. Despite large populations in ASEAN, the skills and quality of the workforce in these countries are not proportional to their quantity. Indonesia, for example, has a population of more than 260 million, making it the fourth most populous country in the world, but most of the domestic workers are young but low-skilled workers, and the almost average population is concentrated in primary and secondary industries such as agriculture and manufacturing. The lack of high-quality digital talent makes it more difficult for ASEAN to digitalize, and will further limit deeper China-ASEAN cooperation in the digital economy.

1.2 Superpower games

In recent years, due to the rapid development of China and the accelerated rise of its international status, the United States and other Western countries have turned their sights on China, attempting to defame China. They constantly form cliques to isolate China and achieve the goal of containing China. The Indo-Pacific region is a vast region that encompasses the Indian Ocean, the Pacific Ocean, and Asia, with

many countries and regions, including ASEAN. This region has great strategic importance and economic potential, and naturally, it is one of the key areas of focus for the United States on a global scale. Since 2019, through a series of strategic plans such as the “Digital Connectivity and Cyber Security Partnership” and the “ASEAN Cyber Policy Dialogue”, the United States has continuously increased its digital economy cooperation with ASEAN and its control of ASEAN, and forced ASEAN countries to accept the US digital economy rules, which makes it more difficult for ASEAN countries to develop digital economy independently, and will inevitably affect digital economy cooperation between China and ASEAN.

1.3 South China Sea Dispute

Since the adoption of United Nations Convention on the Law of the Sea in 1982, South China Sea dispute has become an unavoidable problem of sea supremacy. China has been actively negotiating with ASEAN on the South China Sea dispute, and both sides are well aware that this problem is the biggest obstacle to the implementation of the Maritime Silk Road and further deepening cooperation in digital economy. Resolving this dispute still requires the joint efforts of all parties. First, all countries should respect history and international law, and recognize China’s sovereignty over the islands in the South China Sea. On this basis, all parties can resolve disputes through peaceful negotiations and jointly maintain peace and stability in the South China Sea. Only in this way will we clear the way for China-ASEAN to deepen cooperation in digital economy and achieve common prosperity.

2. Countermeasures

China and ASEAN are important trading partners, and the two sides have broad prospects for cooperation in digital economy. By strengthening digital economy cooperation, they can promote the process of regional economic integration, and follow the global trend of digital transformation, so that they can jointly respond to global challenges and improve competitiveness and adaptability. Although there are many challenges in China-ASEAN digital economy cooperation, with a strong willingness to cooperate and common interests, the two sides can still choose to strengthen digital economy cooperation, gradually narrow the gap among ASEAN countries and between China and ASEAN, promote the construction of the digital “Belt and Road”, cooperate in cultivating high-quality modern digital talents, strengthen digital governance capabilities, enhance the discourse power of digital governance, mutual understanding and political trust, and strengthen cooperation and coordination between them.

2.1 Strengthen the Construction of Digital Infrastructure

The construction of digital infrastructure is an important cornerstone of China-ASEAN cooperation in digital economy. China should give full play to its advantages as a major country of digital economy and provide economic and technical assistance to ASEAN countries, especially those that are relatively backward in digital economy, while maintaining its own development. ASEAN should strengthen the introduction of foreign investment and advanced technology, and strengthen the infrastructure for communication over a network. China can encourage advanced high-tech enterprises to open their foreign plant in ASEAN countries. On the one hand, they can make use of vast digital market in ASEAN and improve local employment, and on the other hand, they can also introduce China’s advanced digital technology and talents into ASEAN to improve the uneven development of digital economy in ASEAN.

2.2 Improve Digital Talent Cultivation

Digital talents are crucial to the development of digital economy, and in the era of digital economy, the competition between countries is actually the competition of their own digital talents. The government can improve the cultivation of digital talents, introduce some relevant policies, provide support for digital talents in various aspects such as scientific research funds and tax incentives, and guide enterprises and institutions to increase investment in digital talent cultivation. China and ASEAN can work together to carry out digital education projects, encourage domestic higher education schools and institutions to organize activities such as sharing digital education resources and teacher exchanges, share scientific research results, improve academic standards through exchanges and exchanges, and promote the innovation and development of digital technology. Countries can also encourage leading high-tech enterprises to open internship programs in digital busi-

ness, provide practice and internship opportunities for digital talents, and improve the ability of relevant staff to understand and apply digital technologies through practical operation.

2.3 Enhance China-ASEAN Strategic and Political Mutual Trust

China adheres a foreign policy of kindness to neighbors., and is willing to work with ASEAN countries to strengthen strategic mutual trust and benefit, deepen the digital economy cooperation between the two sides, and promote regional coordination and cooperation. Under the digital hegemony and containment and suppression of the United States and the West, China and ASEAN need to create a new regional security pattern, build a platform for regional security exchanges and cooperation, and cultivate a common security concept. They should actively participate in the formulation and improvement of international rules for digital trade, promote the formation of a more fair, reasonable and inclusive digital economy governance system and strengthen dialogue and cooperation with ASEAN and other countries. They are also supposed to promote the settlement of various disputes through peaceful negotiations, jointly respond to global challenges, and maintain the sustained and sound digital economic growth.

3. Conclusions

The world today is marked by changes unseen in a century. In the post-pandemic era, countries around the world have also undertaken the digital transformation of their economies, and China and ASEAN have also followed the trend to carry out economic cooperation on the digital “Belt and Road”. Although facing issues such as the large gap in digital economy development, the external challenges brought about by superpower games and the South China Sea dispute, China and ASEAN hold a strong belief that their common interests far outweigh differences, strengthen cooperation in digital technologies and high-quality talents, and enhance strategic mutual trust and understanding. China-ASEAN digital economy development and cooperation will surely achieve transformation in the digital wave, play a more active and leading role in the regional and global digital governance system, and work together with other countries to build a digital community with a shared future.

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Analysis of the Development Direction of Mechanical Design, Manufacture and Automation

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Abstract: With the continuous development of science and technology, mechanical design and manufacturing and its automation have become an important part of modern industry. It plays a key role in improving production efficiency, optimizing production mode and reducing production cost. However, with the continuous development of social economy and the continuous innovation of technology, the machinery manufacturing industry is also facing higher requirements and more severe challenges. Therefore, this paper will deeply discuss the development direction of mechanical design and manufacturing and its automation, in order to provide useful reference and reference for the future development of related industries.

Keywords: mechanical design and manufacturing; automation; production efficiency; development direction; intelligence; networking

Foreword

In the era of rapid development of science and technology, mechanical design and manufacturing and automation technology increasingly become the key driving force in the industrial field. With the continuous upgrading of the global manufacturing industry, enterprises are committed to introducing advanced mechanical design and automation systems to improve production efficiency, optimize resource utilization, and respond to the rapid changes in market demand. This trend has promoted the transformation and upgrading of the machinery manufacturing industry on a global scale, and opened up new possibilities for enterprises to realize the intelligent and efficient production mode.

1. Mechanical design and manufacturing and its automation advantages

1.1. Optimize the production mode

The advantage of mechanical design and manufacturing and its automation lies in the deep optimization of the traditional production mode through the introduction of advanced technology and process. Technologies such as computer aided design (CAD) and computer aided manufacturing (CAM) are widely used. CAD technology simplifies the design process and improves the accuracy and efficiency of the design. 3D simulation and virtual testing with CAD enable engineers to identify and solve problems at the design stage, thus reducing the cost of trial and error. The flexibility of digital design makes the product development more rapid and flexible, which helps to adapt to the changing market demand faster. At the same time, the intelligent production process through the automatic process control, to realize the fine management of the production process, improve the production speed, strengthen the precision and reliability of product manufacturing, so as to improve the product quality.

1.2. Reduce production costs

The introduction of mechanical design and manufacturing and its automation technology has brought significant cost advantages to enterprises, which are mainly reflected in labor cost and resource utilization efficiency. The application of automatic production lines significantly reduces the dependence on human resources, and reduces the human operation demand under the condition of uninterrupted production, thus significantly reducing the labor cost of enterprises^[1]. The introduction of this automation system not only improves the production efficiency, but also effectively reduces the burden of enterprises in labor costs. On the other hand, in terms of material utilization and energy consumption, mechanical design and manufacturing and its automation technology perform well. By optimizing the use of materials, reduce the scrap rate, and improve the efficiency of energy utilization, enterprises can more effectively control the production cost, this kind of fine resource management and efficient energy utilization not only make the enterprise in the manufacturing process reduced material waste, but also help to save energy, provides support for the sustainable development of the enterprise.

1.3. Improve production efficiency

The advantages of mechanical design and manufacturing and its automation are significantly reflected in improving production efficiency. Through the wide application of the automation system, the production line has realized the 24-hour uninterrupted production, which greatly improves the production efficiency. The precision and stability of the mechanical design provide a reliable support for the whole production process, ensuring the high quality of the product manufacturing. The application of automated processes not only accelerates the production speed, but also effectively reduces the manufacturing cycle of products, enabling enterprises to more flexibly meet the market demand. Through real-time monitoring and feedback mechanism, the automation system quickly adjusts production parameters, solves potential problems in time, and improves the consistency of product quality. The combined effect of these advantages promotes the improvement of the overall benefit of the enterprise, and provides a solid foundation for them to occupy a favorable position in the market. The comprehensive advantage of mechanical design and manufacturing and its automation lies not only in improving production efficiency, but also in reducing production costs, improving product quality and enhancing market competitiveness.

2. The development direction of mechanical design and automation

2.1. Integrated development

Mechanical design, manufacturing and automation are ushering in a profound change, promoting the whole industry to the direction of integrated development. In the background of integrated development, mechanical design and manufacturing will pay more attention to the collaborative integration of the whole production chain. By introducing advanced computer-aided design (CAD) and computer-aided manufacturing (CAM) technologies, the digital integration of design and manufacturing is realized. CAD technology makes product design more flexible, reduces trial and error costs through three-dimensional simulation and virtual testing, and provides support for rapid response to market demand. CAM technology realizes digital control in the manufacturing process and improves the accuracy and efficiency of production. The core of the integration development is to realize efficient collaborative operation and information sharing, through the support of information technology, enterprises can establish close coordination mechanism, make each link between achieve closer cohesion, the coordination mechanism is not only reflected in product design and manufacturing, also includes the production plan and marketing, etc^[2]. By integrating each link, enterprises can adjust their production plans more flexibly and launch products to meet the market demand more quickly.

2.2. Development of miniaturization

Mechanical design and manufacturing will pay more attention to the miniaturization and lightweight of products, making the mechanical system design and manufacturing more precise and flexible. Miniaturization technology enables precise control and flexibility of mechanical systems by using smaller and more sophisticated parts, aiming to reduce the volume and weight of the product, thus not only improving the flexibility of the system, but also reducing manufacturing and operating costs. By reducing the size of the mechanical components, the inertia and damping effects of the mechanical system will be reduced, making the system more responsive and more adaptable^[3]. In addition, the trend of miniaturization is also closely related to modular design and manufacturing. By breaking down the mechanical system into smaller modules, each module is accurately designed and manufactured, enabling more flexible assembly and customization, which makes product customization and maintenance more convenient, while improving the reliability of the overall system. The modular design also encourages manufacturing enterprises to better adapt to the changes of market demand, shorten product development cycle and improve competitiveness; miniaturization development not only focuses on the reduction of product size, but also reduce the weight of the product and reduce the inertia and damping effect of the whole system, making the system more responsive and adaptable, which is important for applications requiring high flexibility and high response speed, such as robot and automatic driving system.

2.3. Network development

The development of network is an important trend in the future of mechanical design and manufacturing, which will profoundly change the traditional production mode and realize real-time information sharing and collaborative work between equipment through the digital pro-

duction information network. Through with the aid of the Internet of things, cloud computing technology, improve the transparency, controllability and flexibility of production process, to make the network development will make full use of the Internet of things, cloud computing technology, improve production process transparency, controllability and flexibility, this trend not only make the production process more intelligent, will also improve the enterprise real-time monitoring and analysis of production data, provide more accurate support for decision-making. Through the network development, enterprises can realize the remote monitoring and adjustment of equipment, so as to reduce manpower input and improve production efficiency. The digital production information network will break the traditional production mode and realize the flexible scheduling and customized production of the production lines. The application of this technology enables enterprises to adjust their production plans more flexibly and respond quickly according to the changes in market demand, so as to improve the overall production efficiency^[4]. The development of networking not only brings significant technological advantages at the production level, but also promotes the deep integration of the machinery manufacturing industry and other related industries. Through the digital platform, the efficient coordination between different industries is realized, and the innovation and optimization of the industrial chain are promoted. This open and interconnected industrial ecosystem helps to promote the development of the whole industry to a higher level, and realize the comprehensive upgrading and innovation of the industrial chain.

Tag

Mechanical design, manufacturing and its automation will face more opportunities and challenges in the future. By deeply exploring its advantages in optimizing production methods, reducing production costs and improving production efficiency, and paying close attention to the development direction of integration, intelligence, miniaturization and networking, the machinery manufacturing industry will be able to meet the future development opportunities and contribute to the realization of high-quality development of the manufacturing industry.

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Xiaohongshu interactive marketing strategy

—Research on its SIPS interaction model from the perspective of UGC community

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Abstract: With the rise of mobile technology and Internet advancements, network interaction has become a potent way to disseminate information. Xiaohongshu, boasting 300 million active users, exemplifies a UGC community where users, artists, brands, and platforms engage. This paper examines Xiaohongshu's marketing strategy using the SIPS model (Sympathize, Identify, Participate, Share), providing insights and recommendations. This analysis, focused on UGC communities, is valuable for Xiaohongshu's growth and other Chinese new media platforms.

Keywords: Xiaohongshu, UGC interactive community, SIPS model, marketing strategy

1. Introduction

Today's evolving media technologies enable ordinary people to participate in the archiving, commentary, appropriation, transformation and redistribution of media content, and media consumers become media producers through active participation in media content.

--Henry Jenkins

Xiaohongshu, founded in June 2013, has evolved through three stages from a PDF shopping model to a social e-commerce platform, becoming one of the largest UGC communities globally. It has driven the growth of brands like Perfect Diary and Pechoin, shaping new consumption trends. By emphasizing lifestyle and fostering creativity, Xiaohongshu engages users and creators, alongside brand merchants, in a dynamic content ecosystem, as analyzed through the SIPS model.

Community development focuses on rapid user growth and continuously improving user engagement. As of June 2021, Xiaohongshu's mobile platform saw 120 million transactions monthly, with 94.67% of survey respondents using it, and 76.06% considering it their primary social network. Daily mobile usage is increasing, with 73.24% of users accessing Xiaohongshu multiple times a day. By 2022, Xiaohongshu is projected to have over 200 million active users spending an average of 0.95 hours daily, making it China's largest social e-commerce platform and user-generated content community.

The "Analysis of Psychological Motivation of Xiaohongshu Users" questionnaire, validated via SPSS, reveals that Xiaohongshu users, initially focused on women's overseas shopping, now predominantly consist of young females. Recent content policy diversification and pandemic-induced shifts have broadened the user base, with females now comprising 70%. The majority of users are post-1990s, influencing mainstream consumer demographics.

2. Case Analysis

The four steps of the SIPS paradigm are sympathize, identify, participate, share, and spread. This article describes the four stages of the UGC community's Xiaohongshu platform's product marketing strategy and serves as a helpful resource for more thorough and successful marketing. The SIPS model conforms to user demands in the social media era and offers social platforms a fresh viewpoint on how to comprehend user behavior and develop marketing tactics.

2.1. Sympathize: Create good content, resonate emotions and experiences

Effective product marketing relies on compelling content to evoke both emotion and experience. Emotions play a crucial role in information dissemination, forming the cornerstone of marketing efforts according to the SIPS model. For a brand's message to resonate with consumers, it must strike a chord with their emotions. This resonance, born from deep emotional connections, is essential for successful communication. Xiaohongshu holds high standards for engaging and impactful content in its product marketing strategies.

The notes from Xiaohongshu are basically separated into positive experience notes from the user's producer, user planting notes, business cooperation notes, official notes of brand production, and sponsored advertising notes from user cooperation with the brand. The figure 13The resonance in a user's heart may be loosely classified into emotional idea resonance and visual experience in communication notes and users. The terms "resonance of image experience" and "resonance of emotional concept" both refer to the psychological understanding of the appeal of the product and the concept and concept carried by the product. The former term refers to the recognition of the image represented by the product and the sense of experience brought by the functional service.

64.08% of users in a sample of 142 prefer Realsense notes, indicating Xiaohongshu's role as a content-driven traffic platform. Notes cover various topics like beauty, fashion, and food, engaging users with story-centered and interactive language, enhancing product resonance through real experiences and suggested content.

2.2. Identify: Target the audience , gain product recognition

Accurate audience targeting is required to achieve awareness of the value of the product and to activate product marketing identity. In the current information explosion, users will gather additional pertinent information to seek value confirmation rather than directly participate in activities, so positioning and confirming users is the marketing requirement of the second stage of the SIPS model. Arousing emotional resonance can greatly increase users' expectations for activities.

Xiaohongshu's robust user base, fueled by sophisticated marketing and data analysis, has become a preferred promotional platform for many merchants. Utilizing various user activities and big data algorithms, it offers personalized push services based on consumer interests. The platform's "Double Waterfall" information flow is now a competitive hub for dispersed brand marketing, supported by continuous information production. Its big data precision marketing relies on past user behavior to analyze female consumers' purchasing power and customer demand insights. Through categorizing and managing user information, Xiaohongshu matches suitable merchants with female users, expanding interaction channels, enhancing user consumption experiences, building trust in marketing products, offering genuinely valuable pushes, and ultimately boosting product recognition.

2.3. Participate: Build an interactive community, encourage user participation

The UGC interactive community model is pivotal in converting regular users into loyal followers, forming the cornerstone of Xiaohongshu's marketing strategy. In the era of new media marketing, individuals are not merely passive consumers of information but active participants in various activities, blurring the lines between consumption and production, observation and creation, and bystander culture and participatory culture. The third phase of the SIPS model focuses on engaging users and motivating them to participate in marketing endeavors, aiming to evoke resonance and gain recognition from users.

Following 2014, Xiaohongshu underwent a significant transformation. Within the Xiaohongshu UGC community, users can freely publish, share, and comment on content, fostering interactions and resonances without temporal or geographical constraints. Moreover, users can express their interest in content through likes, collections, private messages, comments, and other means, fulfilling their desire to share and acquire information. Reflecting the participatory nature of user-generated content platforms, a questionnaire survey revealed that 78.87% of respondents, who completed all 142 questions, displayed a keen interest in engaging within the Xiaohongshu community.

To improve product marketing and expand its services, Xiaohongshu has established a collaborative electronic micro-community where users can engage in production, interaction, and consumption behavior related to various topics according to their interests.

2.4. Share & Spread: Increase users' willingness, create a reputation

Additionally, Xiaohongshu offers a place for exchanging product marketing content. The SIPS model's third phase, sharing and dispersion, is essential to effective marketing. The dissemination of activity-related information is largely dependent on the active participation of consumers in order to be completed, as this encourages users' individual initiative, increases their willingness to share, and broadens the scope of information diffusion.

Xiaohongshu included interactive features including liking, commenting, collecting, retweeting, and reminding friends to watch in

various communities and under notes throughout the 2.0 phase of reform. Information may travel to a wide variety of individuals at an exponential rate thanks to user sharing and forwarding since users from many walks of life have their own unique social circles. Social study indicates that 65.49% of users have posted remarks to Xiaohongshu. Users read and share content. By integrating user evaluations and comments, more people will be able to access and follow different platforms, broadening the scope of the communication matrix and increasing the reach of marketing. As more material is added to the platform, it continues to saturate users' eyeballs and spread virally, increasing companies' impact, popularity, and ability to build their own reputations.

Users can actively participate and interact in Xiaohongshu, a participatory cultural community, with their own emotions and experiences to create a new cultural territory. SIPS model is to emphasize the audience's active participation behavior model, the brush to Xiaohongshu strange users, as the platform is a grand event of new information of life products and users' common memory.

3. Conclusion

"Community + e-commerce" serves as the social e-commerce platform as an operation model is gradually going viral. As a typical representative of UGC (User Generated Content), Xiaohongshu connects users and products under the interaction and cycle of SIPS mode:

1. In terms of empathizing, rejecting excessive inferiority in content marketing, and utilizing actual, high-quality material to elicit deep resonances in user psychology and genuine emotions.

2. In terms of identifying, plugging flaws in big data algorithm recommendations, creating a reputation based on word-of-mouth, and fostering user recognition.

3. In terms of participating, enhancing community growth, learning about user interests and requirements, and luring people into interactive communities.

4. In terms of spreading and sharing, boosting user role conversion and experience, e-commerce after-sales services, and popularity through promotion and communication.

To enhance marketing benefits, Xiaohongshu's UGC Participatory Community engages with users, producers, brand merchants, and platforms to complete the "S-I-P-S" and then "S" model marketing cycle. The platform should acknowledge its strengths in user participation and activity, address deficiencies in SIPS circular interaction, and tackle issues like false marketing and inadequate service to foster a blend of user production, interaction, and consumption behaviors. By catering to diverse needs in content production, consumption, communication, and interaction, the SIPS model product marketing on Xiaohongshu evolves into a potent tool for information dissemination, expanding the scope and efficacy of marketing efforts within the interactive market. Additionally, the innovation of Xiaohongshu could inspire the growth of other new media in China, potentially leading to a brighter future for Chinese media in the Internet era by serving as a benchmark and source of inspiration.

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A Multi-modal Discourse Analysis of the Movie Poster Under the Light

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Abstract: This study selects the all-cast poster of the movie Under the light as the research object. From the perspective of multi-modal discourse analysis, it explores the functions of text, color, composition, and costumes in shaping characters and constructing the overall meaning of the poster. The study finds that the all-cast poster, through metaphorical text, color contrast, narrative structure, composition design, and costume imagery, exhibits a mysterious visual style.

Keywords: Under the light, poster, multi-modal discourse analysis

The movie Under the Light, directed by Zhang Yimou and starring Lei Jiayin, Zhang Guoli, Yu Hewei, and others, is a crime thriller film. The film tells the story of police officer Su Jianming, played by Lei Jiayin, teaming up with police officer Li Huilin (played by Zhou Dongyu) to investigate a criminal case involving a large profit group. Since its release in mainland China on September 28, 2023, the film has achieved good box office results. According to data from Beacon Professional Edition, the film has accumulated a box office revenue of over 1.3 billion yuan so far. Additionally, the film has won several championships, including the 2023 National Day box office champion and the box office champion for suspense and crime films in National Day film history.

With a runtime of two and a half hours, the film, known for its cyberpunk visual style, gripping plot, and fitting soundtrack, leaves a lasting impression on viewers. Furthermore, the pre-release all-cast poster, which consists of 13 individual posters, with the expressions of the people intertwined, depicting the characters' complexity, exuding the colors of desire, is a succinct representation of the film. This study, from a multi-modal perspective, explores how images, colors, and text are used to construct the overall meaning of the poster and the role different costumes play in shaping the characters.





Text

The Chinese characters of the movie title Under the Light are generally positioned in the middle of each poster, within the small portrait of the character. However, there are differences in color, which can be broadly categorized into two types: in the posters of the antagonistic characters, these four characters are typically in cool tones of blue, green, and purple, conveying a sense of strangeness, illusion, and coldness; whereas in the posters of the protagonist characters, these four characters are usually in warm tones of yellow-green, gold, and pink, evoking feelings of warmth and hope.

Color

The blending of black and white, and various colors is the visual focus of the entire poster. Black and white represent the eternal struggle between good and evil, while color represents the complexity and contradictions of human nature. This contrast and blending of colors symbolize the eternal struggle between light and darkness, and it also creates a strong visual impact, making the audience feel a tense and conflicting atmosphere. The high saturation of the foreground colors makes everything appear distorted, making it difficult to distinguish between reality and illusion, like a dream. The black and white background images appear dull and lifeless, evoking a sense of pale memories and fading recollections. Therefore, the authenticity of the story atmosphere seems questionable, yet it is like a metaphor, providing viewers with endless space for reflection.

Narrative

The background images of most characters are achieved by the extension of their gaze, which represents the process of reflection in narrative reproduction. For instance, in Zheng Gang's poster, he is smoking a cigar, and the smoke obscures his vision. Firstly, the cigar represents a taste and an elegant lifestyle, symbolizing dignity, quality, and taste, implying that Zheng Gang is a person of status. At the same time, the smoke from the cigar fills his eyebrows and eyes, making it difficult to see his eyes, suggesting that he is either indulging in the world of materialism or deliberately hiding his true intentions from others. David's melancholy profile contrasts with He Xiuli's sorrowful profile, while Liu Feng's deep and inscrutable smile and Yang Xiaowei's meaningful smile, as well as Lisha's innocent smile, form a sharp contrast.

As for the foreground images, Su Jianming, Zheng Gang, David, Liu Feng, and Yang Xiaowei are all half-turned, looking into the distance, with their gaze as the vector, their eyes full of emotions, lost in thought, which is called the process of reflection. The foreground images of the remaining eight characters are all in the process of action: Li Huilin faces the camera, holding the evidence phone in her hand, her expression seems to be telling the truth to the audience; Liu Bo salutes, Wen Hui holds the walkie-talkie, showing his identity and position as the people's police; Tang Danian holds a knife in his hand, lowers his head, and raises his eyes, showing his ruthless and gloomy personality traits; Li Sha touches her pregnant belly, her eyes innocent and pure; He Xiuli wears a gold watch and earrings, and her arms are crossed in front of her chest, showing a proud and guarded posture; Kong Sanshun pulls the grenade ring, and the scene of the explosion is restored under the illumination of fire and light.

Composition

In terms of overall composition, the 13 individual posters are arranged from top to bottom and left to right according to the importance of the characters in the film, with the three main actors in the first row and the important supporting roles in the last row. Each poster is divided into two levels: foreground and background. The foreground image is a half-body portrait of the character, while the background image showcases the facial features of the character. Although the foreground image only occupies a quarter of the entire poster, its hazy and ethereal colors stand out against the black and white background. The background image shows a close-up portrait of the characters, allowing the audience to perceive the joys and sorrows of different characters up close. The partial coverage of the background image by the foreground image adds a sense of mystery and suspense.

Overall, the design style and color tone of the poster remain consistent, without overly highlighting any single character, implying that while there may be differences in different roles, each character is portrayed in a full and complete manner. Besides, the foreground and background images alternate on the left and right sides of the poster, constantly shifting between known and unknown information, hinting at the complexity of human nature and the intricate twists and turns of the story.

In the ensemble poster, except for Li Huilin, David, and Yang Xiaowei who are looking directly at the camera in the foreground image, displaying behaviors such as calmness, sympathy, and compassion towards the observer, the other 11 characters avoid making eye contact with the camera, seemingly ignoring the viewer and focusing on their own interpretations, which in a way provides information to the audience.

All the background images are close-up shots of the characters' faces, indicating that the photographer intentionally wants the audience to observe, speculate, and feel the different character traits and complexities of human nature from an intimate perspective. Only Li Huilin's foreground image is taken from a frontal view, indicating that the photographer is trying to use this character to lead the audience to glimpse the truth. The slightly downward angle of the foreground images of He Xiuli and Kong Sanshun implies a sense of "compassion". However, for these two characters, each has their own sorrowful aspects - He Xiuli is unable to obtain love and harbors resentment due to love, while Kong Sanshun is treated as a pawn by the so-called "big shots" and is seen as a disposable pawn. The framing angles of the other 12 character posters are mostly "oblique" and "level," indicating that the photographer, in most cases, tries to present the characters objectively and impartially without making any judgments, allowing the audience to interpret and perceive the characters in their own way.

Costume

The costumes are designed to showcase the characterization and story background. Specific colors, styles, and accessories in the costumes can help differentiate the characters and provide visual clues about their roles in the story. Additionally, costumes may be designed to evoke specific emotions or symbolize key elements of the story.

In the foreground images, different characters have distinct costume styles, ranging from traditional Chinese attire to suits. Starting from the left in the first row, the first character, Su Jianming, is dressed in a dark red traditional Chinese outfit, resembling a jacket. The detailed collar and shiny, textured fabric convey his simple and understated demeanor. His facial expression appears calm and his gaze is determined. The second individual poster shows Zheng Gang wearing a dark jacket without a tie. The sleek and simple jacket creates a mature and dignified "establishment" image. The top buttons of his shirt are undone, giving a casual yet formal impression, fitting his character as

someone in a high position but caught up in luxury and excess. He holds a lit cigarette in his mouth, with the smoke contrasting with his serious expression. In the poster on the right, Li Zhitian is dressed in a blue suit jacket, paired with a white shirt and a light-colored tie, exuding a professional and competent aura. The suit serves as Li Zhitian's most common "business card," with the understated color choice and smooth, three-dimensional cut enhancing his natural elegance and composure. He is smiling, appearing approachable, but in reality, he is ruthless. The contrast between his outward appearance and inner nature presents a complex impression to the audience.

In the second row, starting from the left, the first character is Chen Huilin. She sports short hair and wears black-framed glasses, exuding an intellectual, serious, and competent vibe. She is dressed in a dark denim shirt with a dark suit-style jacket, the collar hanging down. This outfit conceals her feminine traits, emphasizing professionalism, fitting her role as a policewoman. In the middle is David, dressed in a deep blue suit paired with a matching shirt. His suit collar is slightly open along the center-line, without a tie, giving off a casual yet fashionable and somewhat decadent feel. On the right is Liu Feng, wearing a dark suit jacket with the shirt collar exposed, also without a tie. He appears more traditionally easygoing in a classic notch lapel suit, with a subtle texture that feels gentle and harmonious. The well-balanced fit is both aesthetically pleasing and comfortable, much like his character—unassuming yet intriguing, leading viewers to explore the Pandora's box of his inner self with the smooth three-dimensional cut, simple tailored silhouette, and the natural sheen of high-quality fabric, conveying a sense of unity, confidence, relaxation, mystery, composure, and effortless strength.

The first character in the third row is Liu Bo, wearing a green jacket-style coat with a darker, slightly glossy hue. The jacket collar stands up, and his serious, deep expression gives off a stern and mysterious vibe. The salute gesture adds a touch of righteousness. Positioned in the middle of the poster is Tang Danian, dressed in a striking purple Chinese-style top. The unique collar design forms a downward sloping V-shape. Holding a knife, he exudes a fierce and cunning impression. On the right side of the poster is Wen Hui, dressed in a simple dark tailored jacket. There is no visible shirt or tie at the collar of the suit, emitting a composed and restrained aura. Holding a walkie-talkie, his expression appears somewhat tense or anxious. The attire of Liu Bo and Wen Hui, with their simple, tailored jacket shirts, similar to Zheng Gang's outfit, suggests their "system insider" identity.

The first character in the fourth row is Yang Xiaowei. She is wearing a dark blue shirt with a simple style and loose collar, paired with jeans. Her long hair is tied up, with natural makeup highlighting her feminine charm. Her hands hang naturally by her sides, and her gaze is deep and meaningful. The second character is Lisa, wearing a soft white sweater on top and a light pink or lavender fluffy dress on the bottom, giving off a dreamy and innocent vibe. The slight wrinkles on her collar, high ponytail, and necklace all showcase her youthful and lively temperament. With her hand on her pregnant belly, her expression appears contemplative. The third character is Zheng Gang's wife, He Xiuli, dressed in a dark purple or deep red formal shirt, wearing a watch, with her hands crossed and hair neatly styled in a simple manner. Although she seems reserved, her mature and composed demeanor is evident. The fourth character is Kong Sanshun, dressed in a dark black top, with a deep and serious expression in the glow of the fire, his eyes deep and his facial expression complex, appearing tense and even somewhat despondent.

Each character is set against a background with different colors and gradient designs, accompanied by the character's name and the movie title. Their outfits are neat and clean, with dark tones hinting at the serious tone of the film. The serious facial expressions of each character indicate their important and tense roles in the story. Overall, the diverse clothing styles of the characters, combined with the background colors and text design, create a visually striking and story-rich effect.

Conclusion

Overall, the poster for the movie *Under the Light* is a manifestation of multi-modal discourse, cleverly showcasing the film's themes, storyline, and visual style through metaphorical text, color contrast, narrative structure, composition design, and clothing imagery. The poster employs realism to depict a world filled with darkness and corruption, where colors and elements carry metaphorical and symbolic meanings. Firstly, from a textual perspective, for the antagonistic characters, cool tones (blue, green, purple) are typically used to convey a sense of surrealism, ambiguity, and coldness. These colors create a mysterious and elusive atmosphere, evoking the characters' darkness and cunning. The cool-toned poster backgrounds often complement the clothing and expressions of the antagonistic characters, deepening the audience's

impression of them. While for the protagonist characters, warm tones (yellow-green, gold, yellow-red-pink) are usually used to convey feelings of warmth and hope. These colors create a friendly, positive, and uplifting atmosphere, allowing viewers to feel the characters' kindness and integrity. The warm-toned poster backgrounds complement the clothing and expressions of the protagonist characters, showcasing their determination and sense of justice, evoking resonance and trust from the audience. Overall, the use of color tones plays a crucial role in shaping the characters' images and conveying the emotional aspects of the story.

Regarding colors, the poster overall contrasts black and white tones with color tones, hinting at the moral conflict and complexity of the black-and-white confusion in the movie, while also foreshadowing the suspense and dramatic conflicts of the film's plot.

From a narrative perspective, the background images are largely achieved through the extension of the characters' gazes, a process known as reactive representation in narrative reenactment. Through this design technique, a connection and interaction are established between the characters' gazes and postures with the background images, conveying deeper emotions and story connotations. When the characters' gazes correspond with the background images, the audience feels a visual guidance and connection, enhancing the overall unity and dramatic effect of the poster. This reactive process makes it easier for the audience to understand the characters' inner world and emotional states, while also providing more clues and hints for the development of the storyline.

As for the composition, most characters choose to avoid direct eye contact with the camera, displaying a self-absorbed attitude. This allows the audience to perceive the independence and individual characteristics of the different characters, increasing the mystery and depth of the character images. Additionally, the background images of each individual poster are close-ups of the characters' faces, creating a design that makes the audience feel as if they are standing in close proximity to the characters, closely observing each character's expressions and demeanor, thereby speculating and feeling their respective personality traits and emotional states. This design immerses the audience further into the characters' world, experiencing the complexity and diversity of human nature, enhancing the artistic and aesthetic appeal of the entire poster.

Furthermore, each character's clothing, expression, actions, and background environment in the ensemble poster are full of significance. Through the clever combination of clothing materials, colors, textures, and styles, unique character images are created. Some characters are dressed in formal attire, exuding solemnity and dignity; others wear casual clothing, showcasing a carefree and relaxed demeanor; some characters may present a sly and cunning image, or a serious and just expression, or an innocent look, as well as a profound or composed and calm temperament, even an inscrutable sense of mystery. This diverse design of clothing, expressions, and actions enhances each character's unique personality and characteristics, presenting a diverse array of appearances. Audiences can perceive and understand each character's personality, background, and emotional state through these details, thereby gaining a deeper insight into the underlying connotations and themes of the story.

In conclusion, the multi-modal discourse analysis of the movie poster provides viewers with an effective way to gain a deeper understanding and offer a new perspective for appreciating the movie of *Under the Light*.

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An Action Research: Gender In the Workplace

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Abstract: Among the many factors that affect women's career development, gender segregation is particularly striking. Based on social conflict theory, this study takes five female workers as the research subjects and conducts online or face-to-face interviews with them to understand women's career situation and coping strategies, and further explores the phenomenon of gender segregation in the workplace and proposes solutions based on social conflict theory.

Keywords: gender, gender segregation, social conflict

1. Introduction

1.1 Background

The Global Gender Gap Index 2021 published by the Global Economic Forum points out that the gap in economic dimensions is mainly caused by the labor market participation rates of women and men: among 15-64 years old, the labor market participation rates of women and men are 52.6% and 80%, respectively. Among the many factors affecting women's career development, organizational gender bias is particularly striking. This high concentration of people of one gender in one or some occupations, creating a state of occupational segregation from the population of the other gender, is known as occupational gender segregation.

1.2 Related Theories

The term occupational gender segregation was first introduced by Edward Gross in a paper in 1968 (Edward Gross, 1968), meaning that workers in the labor market are assigned and concentrated in different occupational categories and occupy jobs of different nature depending on their gender. Occupational segregation between men and women can generally be understood as discrimination against women in their career development, it in essence constitutes the sex labeling of occupations gender inequality in the labor market (Nie Chunlei & Zhao Jian, 2018). This article focuses on the social conflict theory, which is the basis for the study of occupational gender segregation. Using the social conflict theory as a starting point, the stereotypical study proposes relevant strategies to alleviate gender conflict in the workplace.

Social conflict theory is represented by L.A. Coser and Ralf G. Dahrendorf, focusing on the causes, forms, constraints and effects of social conflict, and is proposed as a reflection and antithesis of structural functionalist theory. The theory became popular in the United States and Western European countries in the late 1960s, and has caused a great repercussion in Western sociology, penetrating into the empirical studies of various branches of sociology. Modern conflict theory emphasizes the "positive" function of social conflict and is more constructive than functionalism. It argues that conflict not only leads to social disharmony, but also has a social integrative role, and that its interest lies in the mechanisms through which conflict promotes change and prevents the ossification of social systems.

2. Methods/Procedure

This study conducted semi-structured interviews with five professional women. The main contents of the interviews included: the interviewees' main work experiences and related backgrounds, the interviewees' observations and feelings about gender segregation in the workplace, the interviewees' perceptions of the "male culture" in the workplace, and the conflict between family and work. The interview data were then analyzed and processed in an inductive manner.

Table 1 Profile of Interviewer

Name	Age	Career	Years of experience	Academic qualifications	Marital Status	Fertility status
Rita	36	Teacher in university	12	Doctor's degree	Married	No

Ms. Yang	32	Screenwriter	8	Master's degree	Married	One child
Ms. Feng	33	Management	13	Master's degree	Married	No
Ms. Li	33	Teacher in university	9	Master's degree	Married	One child
Ms. Ao	36	Administrater	10	Bachelor's degree	Married	One child

3. Results

After the interviews, all five women had received different degrees of gender discrimination in the workplace, including the glass ceiling effect, stereotypes, maternity treatment, salary treatment, and interviews.

Table 2 Perceived gender segregation in the workplace

Name	The glass ceiling effect	Stereotypes	Marriage and Relationships	Salary treatments	Maternity benefits	Promotions	Interviews
Rita		√	√				
Ms. Yang	√	√	√	√	√	√	√
Ms. Feng		√	√				
Ms. Li		√	√		√	√	
Ms. Ao	√	√	√	√	√		√

Through Table 2, we can see that stereotypes, marital situation and fertility situation are the categories of gender discrimination that all five women have experienced.

3.1 Fertility issues

Ms. Yang said, after I got pregnant, the company reduced my workload to a certain extent, which is basically the same as not assigning tasks to me anymore, and the salary aspect also stopped. After I gave birth, I was reimbursed for maternity benefits, which are required by the state, but for some reasons, I didn't end up getting the money.

Without a series of supporting measures to protect the rights and interests of women of working age, some women of working age will give up childbirth, or even if they return to their families from the workplace, the lack of sufficient supporting measures for protection will directly create new challenges to women's life course and career development (Huo Mengjun & Li Chao, 2011). In most cases, women who have given birth have fewer opportunities for vocational training or promotion in the organization than their male counterparts. Women who have children are affected by childbirth, and employers cut the pay or benefits they should have received out of concern for the time and money costs they incurred during maternity leave, which has seriously violated the workplace equality rights of women who have children. (Luo Ya & Mi Xiao, 2019)

3.2 Stereotypes

Ms. Ao says: When negotiating or approaching clients, we often negotiate at the dinner table, but I dislike some specific table benefits. For example, if a woman is asked to go and have a drink with a client, the woman is responsible for pouring the drink. I work in administration and I'm female, so I'm often the one doing the pouring duties, but I resent that. I want to quit, but my parents think it's normal. And at times like this I need to wear makeup and dress nicely, and it's a tiring life.

Chinese scholar Bu Wei defines "stereotype" as "an oversimplified, lagging, and generalized view of a social group". Some scholars believe that people develop gender stereotypes in their minds as children, which cause them to think and act in a way that is consistent with gender stereotypes later in life and in adulthood (Liu Ni, 2007). These stereotypes often unconsciously influence people's attitudes and behaviors. It is commonly believed that men have highly masculine characteristics, such as being independent and aggressive, while women have highly feminine characteristics, such as being dependent and passive. One of the reasons most recognized by scholars for differences in the evaluation of the sexes in the workplace, including hiring, promotion, development, and evaluation of employees, is the persistence of gender stereotypes.

3.3 The glass ceiling phenomenon

Rita says, I've been working at the school for many years, but I've never been promoted. I'm convinced that I'm well qualified to get a

better position, but every time I've been involved in a promotion, it hasn't worked out. It was always the male who got the opportunity and I felt he wasn't as good as I was and I was still working on it and I was upset about it.

The famous "glass ceiling" theory is due to gender differences, women's career options and promotions are blocked by a layer of glass, out of reach. This is an invisible and artificial difficulty, which is a very big invisible obstacle that many women face when they want to be promoted to a certain position, making their career stay at a calm stage for a long time without a breakthrough.

The five interviewees who encountered occupational gender segregation usually resorted to accommodation and avoidance measures. Many women will make self-sacrifice, give up their own interests, willing to put the interests of the other party or the company's interests above their own, and comply with the views of others, so as to maintain a mutually friendly relationship and avoid further expansion of the conflict.

4. Discussion

From the interviews we learned that sexism still exists to a greater or lesser extent in the modern workplace. This workplace discrimination is difficult to change in the short term, from the point of view of women themselves, how to deal with these problems reasonably.

Firstly, few women are cooperative and rarely talk to men about sexism. In fact, leaders can set common goals for both men and women, and setting a higher level of common goals for both sides of the conflict can facilitate cooperation.

Secondly, adequate communication through negotiation is an important way to deepen understanding and find conflict resolution. I fully understand your needs, and you are fully aware of my needs. Women and men need to respect and trust each other and, while considering and defending their own requirements and interests, they should also fully consider and defend the interests of the other party.

Thirdly, competition is an effective tool. Both sides are unwilling to sacrifice their interests and must go all out for it. This time will break out some arguments, quarrels and head-on confrontation. Generally, to this situation, in order to get to win the result, both sides will not be too concerned about the possible consequences of the conflict.

How to protect the interests of women in the workplace? Cultivate the concept of gender equality in society Popularize the law of gender equality in the compulsory education stage and arrange it into the necessary contents of national education, so that the whole society can form the concept and legal awareness of gender equality.

The government needs to formulate relevant policies and measures to support the employment of women groups in a targeted manner. (Cai Yi, 2011).The Government should establish and improve a diversified dispute resolution mechanism for gender discrimination in employment. Examples include gender equality committees and legal aid mechanisms for employment discrimination. Assisting women in anti-discrimination litigation or rights defense activities while supervising and guaranteeing the implementation of gender equality work is both an after-the-fact remedy for women's employment discrimination and an ex-ante preventive measure against employment discrimination.

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The revelation of truth, goodness and beauty in Rodin on Art

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Abstract: Rodin has many sculpture works in his life, and has the perception and practice of truth, goodness and beauty throughout his artistic career. Through Rodin Art, the author has a deeper understanding of the Rodin, and its revelation of truth, goodness and beauty is also worth learning and practice in later generations.

Keywords: Rodin art theory; true ; good ; beauty

The French sculptor Auguste Rodin is one of the greatest western artists in the late 19th and early 20th centuries. It is also regarded as a symbol of modern sculpture art and has epoch-making significance in the history of western sculpture. His creative thought and artistic aesthetics have a very high influence in the history of art. There is no doubt that Rodin's work has a great artistic charm. The public aesthetic affirmation and reverence for Rodin and his works has been deeply engraved in the bone marrow. In his early days, he advocated ancient classical arts such as Greece and the Renaissance, and then devoted himself to the smelting of realistic sculpture. His sculpture works fully excavate the inner world of the characters and pay attention to the depiction of the spiritual world of the characters, while the later works have the aesthetic tendency of impressionism and symbolism. Rodin has created many classics in his whole life sculpture works, their artistic works and aesthetic thoughts have had a profound impact on the western art world, and throughout Rodin's artistic career, his profound perception and practice of truth, goodness and beauty are throughout.

In Rodin on Art is no exception, Gussel used a pen to elaborate the master Rodin's views and views on art. The dialogue between Rodin and Gussel contains the self-understanding of the essence of art, so that the younger generation can stand on the shoulders of the predecessors and see the mystery of art. By the key words in Rodin Art and the problems and opinions mentioned repeatedly, it is not difficult to understand the artistic thoughts and values of Rodin himself.

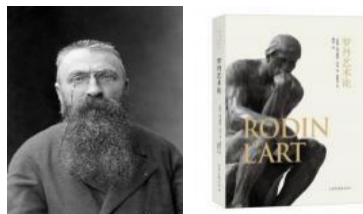


Figure 1: Auguste Rodin, front photo 2: Rodin on Art.

1. Art should pursue the truth of nature

“To be completely rebellious and true. Express your feelings without hesitation... Because for you is absolutely true things, for everyone will also be absolutely true. But don't pretend to deliberately seduce the masses. Be simple, to be naive! August Rodin believes that the essence of art is not to be pleasing to the eye, but to be natural and honest, and to pursue the pursuit of a rebellious truth. He said that art is a mirror, enabling people to recognize their own face, enrich the human heart and soul, and let people more understand the true self itself.

“Truth is beauty”, the truth of art is the beauty itself, and the source of the beauty of art is the truth conveyed by the artist when he expresses nature. Everything should happen naturally, without affectation. This is the idea of the whole book implemented by Rodin. The casual expression and behavior of human beings can be said to be an expression of the process of life, and more reflects the true nature of life. As Rodin said, the reason why they find everything is beautiful is because they can touch the inner “truth” of things, and can find the inner character through the appearance of things. “truth” is “beauty”. The soul of a work lies in whether it has life. Life is natural, and nature is true, and really is the factor that determines whether the work is beautiful.

“Whether a sculptor expresses happiness or sorrow or a certain emotion, he can only move us when his works are alive.”

Sculptors, including all artists, should draw inspiration from nature and create truly vibrant works by observing the gestures, dynamics, and emotions of life. Mr. Rodin’s works turn static sculptures into works of art expressing emotion and vitality. It is full of vitality, dynamic, and very impressionism gives the flow of light on the surface of the sculpture, making us feel the flow of life contained in the sculpture. He reflects this realism in the deep emotion of his work and in his observations of human nature. We can feel his understanding of the truth and tenacity of human nature. Characters often face inner struggles and external pressures. They are no longer the same as the dull static traditional sculpture, more than fresh life, full of clever and jump sense. As if the next second will break through the shackles of the mud, the real appearance in front of us. For example, his work “The Thinker”, which naturally has clear and obvious muscle lines, strength and anger. The characters seem dull, but the eyes reveal a kind of firm and unyielding strength. This kind of rebellious true feeling comes from the deep understanding of the suffering of life, and the indomitable awe of natural life.



Figure 3: The Thinker Fig. 4: The Bronze Age

At the same time, Rodin’s belief in the true art comes from his love for the previous masters. He sincerely respected and loved the artistic achievements of his previous masters, and deeply loved traditions, studied traditions and drew nutrients from them. The order on Rodin’s Art says : “ Love your predecessors sincerely.”Rodin bluntly to Michelangelo’s praise and appreciation, visible Rodin’s praise of the master. But he reminded him : “ But be careful not to imitate others.”In today’s society, it is very difficult to imitate and surpass it. Nowadays, fast food culture is popular. Some people learn from what they think is good, but often just copy the appearance and have no own things. Even after copying countless master works, the heart has not changed, and there is still no progress.

2. Art should uphold the pursuit of goodness

“Good” is a profound and crucial theme in Auguste Rodin’s artistic pursuit. He believes that the responsibility of artists is not only to depict the truth of life, but also to convey positive and positive values through art works. In Rodin on Art, we see how the revelation of good runs through his sculpture creation, and the revelation for contemporary art.

Rodin emphasizes the virtues in human nature through his work. In his sculptures, we can see a deep understanding of human emotion, and a tribute to the virtues of integrity, courage, fraternity, and more. For example, his sculpture “Kiss” conveys love and complete kindness, expressing a kind of resonance and emotional bond through the image of two people embracing each other tightly. This emphasis on virtue makes the works of art not only the aesthetic enjoyment, but also a kind of promotion and calling for good.

He expresses his trust in human nature and his faith in goodness through sculpture. His works often present a positive view of human nature, through the capture of the human nature of the body language and expression of the characters. This trust in human nature makes the viewer not only see a kind of formal beauty, but also feel a kind of emotional kindness and warmth when appreciating Rodin’s works.

The revelation of good has a great significance in contemporary art. Good expression makes art not only stay in the aesthetic level, but also have a sense of social responsibility. By praising the virtue, Rodin guides the audience to think about the social ethics and moral concepts, and makes the art works become a positive social force. In contemporary society, artists by expressing their attention to goodness can guide the society to pay attention to positive and constructive values and bring positive influence to the society.

3. The beauty of art is ugliness and truth

Compared with the ordinary public aesthetic, Auguste Rodin’s definition of artistic beauty is very different. Many of Rodin’s works

were labeled as “ugly” at that time. Often not very accepted by the world, and even attacked and abuse. Rodin thought that the art he insisted on should not pretend and deliberately seduce the masses.”What is recognized as ugly in nature can also be the most beautiful in art.”” Because art thinks beauty is only things with characteristics.” “ Everything in the eyes of the artist reveals the characteristics.”Rodin he hated the carving of cumbersome tombs, against deliberately decorate nature, reduce the pain of expression, hide the decay of old age. Art is not the ultimate pursuit of pleasing to the eye.

In the eyes of the public, beauty is healthy, complete and beautiful. As Venus is beautiful, Hugo’s Gasimodo is extremely ugly. To Rodin, “what is considered ugly in nature has more characteristics than those considered beautiful”. The works of art in today’s society, both in form and in style, should abandon their dazzling skills and strive to return to their original simplicity. How to define ugly, and what is beauty, these cannot be defined.

“The Ugly Beauty” in the elderly woman, her legs curled up, the breasts are old and withered, the abdomen accumulated folds, making the viewer feel compassion. The old woman’s action, manner, muscles, skin, the whole to the details is not redundant, every inch of skin reveals the heart of the whole statue. Not only on the outside, but also on the real inside.

Rodin said, “ There is no life, namely, no art.”The beauty of art is the real thing with the outside and the inside.”If an artist only tries to reproduce his appearance, like copying the lines on his face, without any expression of character, then he is not worthy of admiration. The xiao he should seek is the xiao of the soul... “” The ugliness in art is something without character, namely true without appearance, nor true without heart.”Artificial and false things are ugly even if they are pleasing to the eye, which cover people’s eyes and hearts, not the material embodiment of human mind.

4 Conclusion

“Young people who wish to be the messengers of beauty,” said Rodin’s opening order. Rodin’s absolute pursuit of truth, goodness and beauty in his life is the loyalty of personality and the worship of nature. These three elements —— the truth, goodness and beauty do not exist in isolation, but interweave and jointly construct the three-dimensional space of Rodin’s artistic concept. Through the pursuit of truth, the artist shows a deep understanding of life ; through the expression of good, the artist guides the viewer to perceive positive and constructive values ; and through the pursuit of beauty, the artist creates profound and fascinating works of art to stimulate the aesthetic enjoyment. Reality not only exists in life, but also is the source of inspiration for artistic creation, and it is the emotional bond for artists and viewers to feel and experience together. Good things are positive, positive values. Beauty is a kind of common language that transcends time and space, and it is the inevitable pursuit of shaping a better future. The mutual integration of the three makes Rodin’s works have a unique artistic charm, and also provides a profound inspiration for contemporary artists.

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Analysing the wonders of pragmatics

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Abstract: Pragmatics exists in people's daily life all the time, and its importance can be seen in the fact that people use pragmatics to transmit information and convey emotions. Among them, two important components of pragmatics are conversation analysis and the principle of cooperation. Conversational structure analysis mainly includes turn-taking, neighbouring pairs, correction mechanism, etc.; the principle of cooperation mainly includes quantitative criterion, qualitative criterion, relevant criterion and modality criterion. The principles of conversational analysis and co-operation appear all the time in our daily lives and play a very important role in influencing our speech and communication with them. This paper takes the British long novel *Pride and Prejudice* and the TV series *Family Guy* as examples to show the wonderful use of pragmatics by analysing the characters' character in *Pride and Prejudice* and the creation of humorous effects in *Family Guy*.

Keywords: pragmatics; conversation structure; co-operation principle; *Pride and Prejudice*; *Family Guy* and *Girl*

Pragmatics is an emerging subject area in the various branches of linguistics that takes language meaning as its object of study. Pragmatics is the specialised study of the understanding and use of language, the study of particular discourses in particular situations, and the study of how language is understood and used through context. Two of the important components of pragmatics are conversation analysis and the principle of cooperation.

1. Analysis of Conversational Structure in *Pride and Prejudice*

Conversation Analysis (CA) does not refer to any study of conversation, but rather to a specialised school of thought (often replaced by the capital CA in the English literature). Conversationalists use their linguistic knowledge as well as non-linguistic socio-cultural contexts just to express themselves and understand each other. Conversation not only shows the communicative competence of the interlocutors, but also reflects the general principles of social interaction, whereby the parties harmonise their purposes, images and interpersonal relationships.

1.1. One of the turn-taking transitions

Researchers have pointed out that conversation is characterised by turn-taking: a conversation must consist of at least two turns of speech, where A speaks first, and after a pause, B then follows, and the distribution of the dialogue between the two individuals is A-B-A-B-A-B-A-B. E.g.,

Lady Catherine: "And that I suppose is one of your sisters."

In this clip, it is Lady Catherine, Mrs Bennet and Elizabeth who are talking. In this question, Lady Catherine mentions "your sister", which shows that she has already designated the speaker under this turn-taking.

The second rule for talk round transitions is that if C chooses N in one of the talk rounds at the time, then C must stop talking and N must go on to talk, with the transition occurring at the first TRP after the choice of N. For example:

Mrs Bennett: "Oh! a bachelor, my dear, a bachelor indeed! A rich bachelor: £4,000 or £5,000 a year. What a blessing for the daughters!"

Mr Bennett: "How is that? What business is it of the daughters?"

Mrs Bennett: "My good lord," replied the wife, "how you call it a nuisance! To tell you the truth, I was thinking how nice it would be if he picked one of our daughters for a wife!"

Mr Bennett: "Is that his intention in living here?"

Mrs Bennett: "Intention! Nonsense, what a thing to say! But he's got his eye on one of our daughters. You'll have to pay him a visit as soon as he moves in."

1.2. Talking Wheel Switching III

The third rule of talk-round switching is that if C does not choose N, and no other participant presses for self-selection, then C may (not must) continue to speak (i.e., claim the right to continue to speak for the next round). E.g.:

“Miss Bennet, wouldn’t you like very much to take the opportunity of a Scotch dance?” Darcy asked, and Elizabeth did not answer him.

..... (Darcy) then asked again. “Miss Bennet, are you not very anxious to take this opportunity to have a Scotch dance?”

2. Violation of the Principle of Co-operation in Family Guy

2.1. Violation of quantitative norms

The Maxim of Quantity

(1)

One day, Liu Xing’s grandma came to see Liu Xing to go to Liu Xing’s parent-teacher conference for Liu Mei.

Grandma: Tell me did you get into some trouble again?

Liu Xing: Aiya, something small!

(2)

One day, Liu Mei was educating Liu Xing and asked him what he should and should not learn.

Liu Mei: Liu Xing, what do you think should be learnt and what should not be learnt?

Liu Xing: Their sexiness, their revealing clothes.

Liu Mei: My son is great!

Liu Xing: Mum, what I said is what should be learnt!

(3)

One day, Liu Xing sneaks off to play at an Internet cafe, and when he comes back, Liu Mei keeps asking after Liu Xing to find out where the hell he’s been.

Liu Mei: Liu Xing, where the hell have you been?

Liu Xing: In the future, you don’t care about my business.

Liu Mei: Ah? What did you say? What do you mean, I don’t care about your business? How come you don’t let me control when you drink milk? When you were sick, why didn’t you let me control it? Why didn’t you let me control you when you were learning to walk? Now that you’re letting me take care of you, how come you’re all grown up and have hardened your wings and can fly on your own?

2.2. Violation of qualitative norms

For example:

(1)

Xiaoyu: Mum, my hand was bitten by a bug.

Liu Mei: Yo, what’s going on? Yo, mosquito bites it, mum to scratch.

Xiaoyu: Why do mosquitoes only bite me and not Liu Xing? Is this not my home?

Liu Mei: Don’t be ridiculous, how is this not your home ah, this is your home ah! You see mum and dad are not there, right? Do you know why mosquitoes bite you but not Liu Xing? Because your blood is sweet, Liu Xing’s blood is stinky, mosquitoes smell, here sweet blood, I’ll bite him!

(2)

Liu Mei and Xiao Xue are discussing idols, Liu Mei wants to get closer to Xiao Xue and the two start chatting.

Xiao Xue: Auntie, do you like F4?

Liu Mei: I like it a lot.

Xiao Xue: So do you think F4 is handsome?

Liu Mei: Handsome! I think F4 is more handsome than F1, F2 and F3!

Xiao Xue: So Auntie, what bands are F1, F2 and F3?

(3)

Xia Donghai: Liu Xing, tell us how the little mouse died.

Liu Xing: In a dark and windy daytime, the little mouse was locked up at home alone, thinking, "How nice it would be if I could go out to play, even if I play video games for half an hour". So it secretly matched a key and ran out to play.

Xia Donghai: I think you want to go out to play! Liu Xing, take out the key you secretly matched!

2.3. Violation of relevant norms

(1)

Liu Mei: Xiao Xue, you must be hungry at home, try my cooking.

Xiao Xue: I'm not used to eating with the help of others.

(2)

Xiao Xue brings her "boyfriend", Wild Boy, home to introduce him to Liu Mei and Xia Donghai.

Liu Mei and Xia Donghai: Xiao Xue, who is this?

Xiao Xue: The flower that symbolises love, how fragrant it is!

(3)

Liu Mei: not stimulated, right? Just you this kind of to Xiaoxue kind of good students used to open the parent-teacher conference, you must have a huge gap in the heart, is not a kind of head banging feeling!

Xia Donghai: The meeting was quite successful

Grandma: (coughing) Tickle in the throat.

Liu Mei: What did the teacher complain about again?

Xia Donghai: I'll get some medicine for grandma.

In this clip, Xia Donghai does not answer Liu Mei's question positively in order to hide it from Liu Mei together with Liu Xing's grandma and avoid Liu Mei's question about Liu Xing's performance at school. So Xia Donghai deliberately violates the relevant guidelines and always says something irrelevant, for this reason to divert Liu Mei's attention and avoid answering Liu Mei's questions.

2.4. Violation of modal norms

(1)

Xia Donghai: Xiaoxue, I think we should talk alone!

Xia Xue: I want to talk to my "Wild Boy" alone.

Wild Boy: I'll leave you to it.

Xia Xue: Page 48, lines 3-16!

Wild Boy: I'm here for you, I'm here for you.

(2)

Liu Mei: Why do orangutans refuse to evolve?

Liu Xing: Give me a reason to evolve.

Liu Mei: Why isn't it talking?

Liu Xing: What do you want me to say?

Liu Mei: In the lack of hearing gene differentiation process.

Liu Xing: My ears are fine.

Liu Mei: go go, don't always make trouble here.

Liu Xing: You do not say my?

Liu Mei: Who's talking about you, I'm talking about the gorilla!

(3)

Xiaoyu, Xiaoxue and Liu Xing are introducing themselves.

Xia Xue: My name is Xia Xue.

Xiaoyu: My name is Xiayu.

Liu Xing: My name is Hail.

3. Summary

Pragmatics is the specialised study of the understanding and use of language, the study of particular discourses in particular situations, and the study of how language is understood and used through context. Grice's principles of co-operation mainly include: quantitative guidelines, qualitative guidelines, relevant guidelines and modality guidelines. These four guidelines are closely related to our daily life, and Grice believes that abiding by them is abiding by the principle of cooperation. In this paper, the character traits of Elizabeth, Mrs. Bennett and Mr. Bennett are analysed with the help of the three laws of conversation structure analysis of turn-taking analysis, which creates a rich character image for us; the TV series "Children of the Family" has violated Grice's principle of cooperation many times in its major protagonists, so that "Children of the Family" appears to be particularly humorous and interesting, and the wonderful use of pragmatics is precisely embodied in here.

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Research on Cost Control throughout the Whole Process of Hospital Construction Projects

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Abstract: Controlling the engineering cost of hospital construction is an important indicator for measuring the comprehensive management level of hospital engineering construction, and also a major indicator of reflecting the investment efficiency of the project. It is a topic worth exploring. The level of engineering cost control in hospital project construction not only reflects the comprehensive management ability of hospital infrastructure, but also reflects the investment and social benefits of the project. It is also the key to controlling project investment and improving the efficiency of construction fund utilization. How to make reasonable use of human, material, and financial resources to achieve optimal results is the fundamental purpose of engineering cost. How to do a good job in cost control from various stages and links? This article takes the construction of Liangjiang Campus of Chongqing Medical University Affiliated Children's Hospital as an example to explore how to carry out good engineering cost control in project construction.

Keywords: engineering cost, control, effectiveness

1. Preface

During the construction process of a hospital project, due to the difference in construction content from other construction projects, the hospital building must not only comply with medical and nursing procedures, but also meet functional standards. The most important thing is to highlight comfort and scientificity. Based on the actual management of hospital construction projects, we should recognize the advantages of whole process cost control management, so that the whole process cost control management work can be effectively carried out, provide effective management methods for hospital construction projects, and provide strong support for hospital construction projects in cost control work.

2. Full process engineering cost control

2.1 Decision stage

The investment estimation in the decision-making stage is an important component of preparing project proposals and feasibility study reports in the early stage of project construction. It is one of the important basis for selecting investment plans and plays a very important role in the decision-making and success of construction projects. We should strictly control the engineering cost during the project decision-making stage. 1. Collect basic information well. Conduct market research, collect relevant basic data, and carefully analyze the accuracy and reliability of the information to ensure the accuracy of investment forecasts and economic analysis. 2. Make a good technical and economic demonstration. Organize communication and coordination between the design institute and experts, and organize professional engineers to carefully review and provide opinions on the estimated content. 3. Optimize the plan well. After completing the market research, combined with the actual situation of the new campus project, multiple options will be compared and selected.

2.2 Design phase

The design phase is an important stage that determines the cost of engineering, and it is also the leader of cost control in construction projects. Only by controlling the engineering cost in the design phase can we ensure that the engineering cost of hospital construction projects is reasonably controlled. Due to the large overall investment and high construction costs, hospital construction projects are more difficult to construct than ordinary residential and office buildings. Therefore, in the design stage, there should be sufficient understanding of the uniqueness of hospital buildings, fully considering the specific requirements of using departments. A large amount of energy and time must be spent

on effective communication with various departments to avoid the waste of continuous rework and modification in the later stage. According to the particularity of hospital construction, the design scheme should be reviewed and demonstrated during the design phase to ensure that the hospital building design scheme can meet practical needs in terms of functionality, overall investment, scientificity, effectiveness, and rationality.

2.3 Bidding stage

The cost control of bidding for infrastructure projects is an important part of the entire process cost control. Although the current bidding work is entrusted to the engineering bidding agency, as a construction unit, it is necessary to standardize the management of various bidding, understand the qualifications of participating bidding units, the performance of enterprises, and the ability to fulfill contracts. The preparation of the bidding list and control price must be standardized and reasonable, and attention should be paid to whether the pricing method is reasonable, whether the list is missing items, whether the feature description is complete, whether the cost of measures is reasonable, whether the setting of temporary funds, temporary estimates, and daywork is reasonable, and whether the prices of main equipment and materials are reasonable. And combined with the market, reduce disputes during and after the construction process and settlement, avoid construction units taking advantage of loopholes, control prices not to be too high or too low, ensure construction quality, give reasonable profits to the construction party, and also control the hospital's financial investment, making good use of every penny. Promptly modify any issues discovered during the process of reviewing drawings and compiling lists to ensure the accuracy of the bidding engineering quantity list; Focus on contract pricing terms, such as changing pricing principles, material adjustment, progress payment, and unbalanced quotation modification clauses; The construction unit shall clarify the functional requirements and technical parameters, and the bidding documents shall specify the grade and brand of construction materials and equipment.

2.4 Implementation phase

The engineering cost control during the construction phase is the most important part of engineering cost management in the entire construction project management, which has a huge impact on the overall cost control of the entire project. Due to the particularity of hospital construction, professional personnel and teams must be present at the construction site to strictly control design changes, construction period, quality, and safety. During the construction process, the Traditional Chinese Medicine Hospital should strengthen on-site construction management, supervise the construction party to follow the drawings, strictly implement relevant construction techniques and standards, avoid increased investment due to design changes and non-compliance with drawings, achieve effective control of engineering costs, and meet the actual needs of engineering cost control.

2.4.1 Optimize construction organization design and implementation plan

In the construction of the new courtyard, due to the special nature of on-site environmental factors, construction is restricted and it is necessary to readjust and optimize the construction plan. Several prominent examples are as follows: (1) The implementation plan of the reverse construction method is adjusted through multiple technical and economic analyses to achieve investment savings; (2) Optimization of retaining wall support, from original anchor retaining wall to gravity retaining wall; (3) Comparison and selection of prefabricated hollow floor plans, understanding the process, examining the manufacturer's effectiveness, and drawing on the cost and economic analysis of prefabricated hollow floor plans from other hospitals.

2.4.2 Strengthen contract approval and tracking management

One is to implement standardized management, the second is to draft contract texts rigorously, the third is to manage contracts in accordance with the law, the fourth is to strictly enforce the contract review system, and the fifth is to strengthen the tracking and inspection of contract execution. Pay attention to the consistency between the contract and the bidding documents, and the principle of adjusting the project price; Agreement on settlement and payment methods; Construction period and quality assurance, quality requirements; Division of liability for breach of contract and punishment; And agreements on the brand level of materials.

2.4.3 Develop and improve management systems

During the construction process of the new campus, various investment management systems and measures have been formulated, such as change management measures, quality and price recognition management measures, recipient visa management, investment dynamic management requirements, progress payment review management, claims, etc. During the implementation process, strict adherence to requirements and management processes has been implemented. (1) Within one month after the entry of each professional project, clear the standards in a timely manner and establish a ledger with number 0; (2) Strictly manage the design change program to ensure the feasibility of technical proposal demonstration, controllable investment calculation, and timely completion of procedures; No implementation is allowed without following the change procedure; (3) Strengthen material and equipment management. Management of sealing samples for incoming materials; Model guide; Strictly control the management of material and equipment quality and price recognition; Proactively resolving price disputes, such as comparing and selecting samples after decoration on-site; (4) Visa recipient management. On site image recording, on-site receiving party's complete signature, and timely cost estimation; (5) Establish a dynamic investment ledger. According to the bidding situation of professional engineering, timely verify and establish the No. 0 ledger; Real time negotiation and visa based on changes, increase or decrease costs, and grasp changes in professional engineering investment amounts.

2.4.4 Strict design change management

All design changes during the construction phase of the new campus adhere to strict management and standardized review. The main approach is to establish the principle of design changes. The new campus construction adheres to the principle of no or minimal design changes, but only limited design changes can be made due to construction conditions, construction processes, design defects, engineering costs, and other reasons. The reasons for the changes should be explained in detail when submitting the design changes; The second is to standardize the approval process, propose the unit of change intention, collect relevant information based on the change items, and fill out the Engineering Change Negotiation Form; The construction agency shall organize pre evaluation by all participating parties; If drawings need to be issued by the design unit, the design unit shall issue revised drawings; The contractor shall prepare a construction plan and estimate the cost of the change according to the change intention; The construction agency, in conjunction with the supervision unit, tracking and auditing unit, and relevant parties such as the hospital, shall conduct audits and sign off; Finally, a signed Engineering Change Negotiation Form and relevant attachments will be formed to ensure the rigor of design changes.

2.4.5 Completion settlement

Completion acceptance is the final procedure of the entire construction process of a construction project, which is an important link in comprehensively assessing the construction work, checking whether the design and engineering quality meet the requirements, and reviewing whether the investment and use are reasonable. The cost control in the completion settlement stage of the new campus focuses on reviewing the authenticity, reliability, and rationality of the completion settlement and final accounts to prevent unplanned expenses that should not be included in the cost from being included in the construction cost. Control the basis for engineering settlement preparation, strictly review various unreasonable factors in engineering settlement, such as overcalculating engineering quantity, high unit price, and duplicate calculation of fees.

3. Conclusion

In summary, the cost control management of hospital construction projects runs through various stages of engineering construction, and is a comprehensive cost management throughout the entire process. The focus and effect of cost control are completely different in different stages. Only by adopting scientific pricing methods and practical pricing criteria at each stage of project construction, and reasonably determining investment estimates, preliminary design estimates, and construction drawing budgets, can investment efficiency be improved and effective cost control of construction projects be achieved.

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Analysis of the Use of Stance Marker in Argumentative Essays by Chinese and British College Students

— A corpus-based study

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Abstract: Referring to the specific classification of stance markers proposed by Zhang and Xia(2015), this study set out to explore the use of stance markers by Chinese EFL and British college students. Based on a sub-corpus of LOCNESS corpus and the Chinese students' argumentative essay corpus, the study used Antconc to search for stance markers, calculated standardized frequency of the use of stance markers, and compared the use of stance markers in argumentative essay writing by Chinese and British college students. Finally, the study put forward some suggestions for Chinese students' use of stance markers in argumentative essay writing.

Keywords: Stance markers; Corpus; Standardized frequencies; Characteristics

1. RESEARCH BACKGROUND

The expression of stance and attitude was a topic of great importance to research. In recent years, there has been an increasing interest in the study of authorial stance in linguistics and related disciplines. Authorial stance refers to the attitudes, feelings and judgments expressed by authors in academic discourse, using multiple language resources, about the meaning of propositions in the text or by other researchers. The presentation of the author's point of view should indicate both the author's critical attitude to the truth of what is being said and the author's courtesy and respect for the reader. Mastering this skill is vital for effective academic writing in English, as it allows authors to not only communicate information but also persuade and influence readers' perspectives.

Xu Hongliang (2007) investigated the usage patterns of authorial stance markers among proficient Chinese learners of English, focusing on the interpersonal dynamics within academic discourse. Despite ample research on stance markers in texts by native English speakers, insufficient attention has been given to academic texts by Chinese authors proficient in English, particularly regarding stance marker features. While some scholars have explored gender disparities and spoken language usage of stance markers, there is limited research comparing the use of stance markers in argumentative essays by Chinese and foreign university students. Given these gaps, conducting a comparative analysis of stance marker usage in English writing by Chinese university students and native speakers holds significant value. Subsequently, providing recommendations for Chinese English learners regarding stance marker usage becomes imperative.

2. RESEARCH DIRECTION

The study focuses on the use of stance markers in English writing by Chinese college students, recognizing their importance for conveying interactivity and inter-personality. By comparing the usage of stance markers in essays between Chinese students and native English speakers, the research aims to identify differences and provide recommendations to enhance Chinese students' use of stance markers in English writing, potentially contributing to improved communication skills in academic and professional contexts.

3. RESEARCH PURPOSE

The aim of our study is twofold: firstly, to investigate the usage of stance markers in English argumentative essays authored by Chinese college students and native speakers, identifying distinct features or discrepancies. Additionally, we aim to provide advice for improving the use of stance markers in English argumentative essays written by Chinese college students. This endeavor seeks to enable Chinese students to produce more standardized English argumentative essays and effectively convey their positions using stance markers.

4. RESEARCH METHODS

4.1 Research Questions

- (1) What are the characteristics of the use of stance markers in the writing of Chinese and English university students respectively?
- (2) What are the similarities and differences in the use of their stance markers?

4.2 Data Resources

We have compiled a small academic English corpus by gathering English Argumentative Essays from first-year English majors at Sichuan University, totaling 256 essays. This corpus provides insight into the writing tendencies of first-year students. Through comparison with LOCNESS, a corpus of native English essays, we have selected argumentative essays authored by British university students, ensuring comparability with our own corpus. This approach allows us to explore the usage characteristics of stance markers in the writing of Chinese college students in relation to their native English-speaking counterparts.

4.3 TOOLS

We used Antconc to search and count the actual observation frequencies of the study subjects; but for some stance markers with a certain structure, such as “so+adj”, “really+adj”, they cannot be retrieved directly with Antconc. Therefore, we first used Treetagger to tag the corpus part-of-speech, and then import it into Antconc for retrieval.

4.4 Research process

4.4.1 Identify and Filter Retrieved Objects

The process of identification: In this study, we adopted Zhang and Xia’s (2015) classification, categorizing stance marker language into four groups: hedges, boosters, attitude, and self-mention, comprising a total of seven sections. We obtained all research objects from two sources: firstly, we screened research objects from Kristen Precht’s paper (2008:91), excluding colloquial expressions like “damn” and “fuck”, and incorporated the remaining expressions into our research. To enrich our research objects, we supplemented them with additional expressions sourced from personal habits and writing experiences as college students.

Table 1: The study objects of our research

Hedges stance markers		Boosters stance markers		Attitude stance markers		Self-mention stance markers
Variable type	Gentle type	Fact-type	Inevitable type	Emotional type	Judgment type	Self-mention type
a bit kind of maybe probably sometimes sort of usually	it looks it looks like it seems it sounds like almost, just to pretty, well anyway	okay, actually, fact, it shows that, they told such a, especially full, real	of course definitely sure absolutely at all totally	amazing crazy happy hate like love thank would like	bad, too bad beautiful, best better, good, great fun, funny, interesting nice, problem, right, cool serious, stupid, weird, wrong you need to, you need they want to, they wanted to we want to, you want to you don't want to, they don't want to you want they want, they thought, really	I hate I like I love I'd like I need I need to I/we want to I read I knew I know I don't know I thought

4.4.2 Data Processing

We organized the actual observation frequencies of all the research objects with excel, and then calculated the standardized frequencies of them according to the calculation method of the standardized frequency.

The way to obtain the Standardized Frequencies:

$$\text{Standardized Frequencies} = \text{Actual Observed Frequencies} * 1,000$$

(per 1,000 words) Overall Frequencies

Discard the stance marker data with a certain structure(mentioned above) for this part of the data cannot reflect the use characteristics and usage logic of the stance marker of Chinese and British college students.

5. RESEARCH FINDINGS AND DISCUSSIONS

According to the retrieved data, we selected the most frequent occurrences of each type of stance marker in each of the two corpus as typical representatives. (see Table 3 and Table 4)

5.1 The characteristics of the use of stance makers in the writing of Chinese university students

We found that Chinese students tended to use judgmental stance markers and self-mentioned stance markers in their writing, especially self-mentioned stance markers expressing a strong subjectivity of the writers. In addition, they were less likely to use hedge stance markers and inevitable type stance makers.

Table 3: The typical statistics of Chinese corpus

Variable type	Hedges stance markers				Boosters stance markers				Attitude stance markers				Self-mention stance markers							
	Actual observation frequencies	Standardized frequencies	Gentle type	Actual observation frequencies	Standardized frequencies	Fact-type	Actual observation frequencies	Standardized frequencies	Inevitable type	Actual observation frequencies	Standardized frequencies	Emotional type	Actual observation frequencies	Standardized frequencies	Judgment type	Actual observation frequencies	Standardized frequencies	Self-mention type	Actual observation frequencies	Standardized frequencies
a bit	1	0.005700812	it looks	5	0.028501559	actually	59	0.336318397	of course	31	0.176709666	happy	15	0.085504677	bad	34	0.193810601	I like	235	1.339673275
kind of	7	0.039902182	it looks l	4	0.022801247	fact	63	0.359119844	definitely	7	0.039902183	like	235	1.339673275	beautiful	29	0.165309042	I love	18	0.102605613
maybe	37	0.210911537	it seems	34	0.193810901	question	22	0.12540686	sure	13	0.074104053	I love	18	0.102605613	best	75	0.427523386	I'd like	10	0.057003118
probably	14	0.079804365	it sounds	3	0.017100935	it shows th	79	0.450324633	absolutely	9	0.051302806	they love	10	0.057003118	better	103	0.587132116	I need to	44	0.25081372
usually	31	0.176709666	almost	36	0.205211225	they told	19	0.108305924	at all	10	0.057003118	rather	32	0.182409978	good	137	0.780942718	I've want to	3	0.017100935
			anwavy	5	0.028501559	especially	68	0.387621203	totally	18	0.102605613	thank	19	0.108305924	great	269	1.527863564	I need	15	0.085504677
						full	46	0.262214343				I'd like	10	0.057003118	I need to	44	0.25081372	I knew	2	0.011400624
						real	41	0.233712784							you need to	39	0.22231216	I know	6	0.034201871
						such a	34	0.193810601							really	72	0.41042245	I thought	14	0.079804365

5.2 The characteristics of the use of stance makers in the writing of English students

Native speakers tended to use judgmental and factual stance markers, less hedge stance markers and inevitable type stance makers, and hardly any self-mentioned stance markers.

Table 4: The typical statistics of LOCNESS corpus

Variable type	Hedges stance markers				Boosters stance markers				Attitude stance markers				Self-mention stance markers							
	Actual observation frequencies	Standardized frequencies	Gentle type	Actual observation frequencies	Standardized frequencies	Fact-type	Actual observation frequencies	Standardized frequencies	Inevitable type	Actual observation frequencies	Standardized frequencies	Emotional type	Actual observation frequencies	Standardized frequencies	Judgment type	Actual observation frequencies	Standardized frequencies	Self-mention type	Actual observation frequencies	Standardized frequencies
a bit	152	0.022724534	it looks	20	0.00299007	actually	1180	0.176414146	of course	384	0.057409349	amazing	26	0.003887091	bad	431	0.064426014	I like	16	0.002392056
kind of	668	0.098968347	it seems	785	0.117260256	fact	2595	0.537485132	definitely	192	0.028704675	happy	254	0.037973893	beautiful	151	0.022575031	I love	11	0.001644539
maybe	304	0.045490668	almost	1181	0.17656365	question	2117	0.318498929	sure	413	0.061744951	I love	16	0.002392056	best	2042	0.305259175	I need	46	0.06877162
probably	921	0.137692736	pretty	67	0.010016735	especially	1699	0.25400647	absolutely	138	0.020182974	I love	11	0.001644539	better	2115	0.316199932	I need to	38	0.005681134
usually	1216	0.181796273	well	5402	0.807617961	full	1149	0.171779537	at all	614	0.091796157	rather	3174	0.474524153	good	3453	0.516235633	I've want to	101	0.015099855
			anwavy	82	0.012259288	real	1740	0.260136114	totally	222	0.03318978	thank	16	0.002392056	great	2174	0.325020639	I knew	41	0.006129644
						such a	1287	0.192411022							problem	3143	0.468889544	I know	40	0.005980141
															right	2783	0.416068279	I don't know	20	0.00299007
																		I thought	55	0.008222693

5.3 The similarities and differences in the use of their stance markers

In analyzing the usage patterns of stance markers in argumentative essay writing, we observed that both Chinese and English university students predominantly employed judgmental stance markers, while hedge stance markers and inevitable type stance markers were used less frequently. Notably, Chinese students exhibited a higher frequency of using the variable stance marker “maybe” compared to native English speakers, a choice that tends to be colloquial. Conversely, British English, known for its formality, rarely incorporates “maybe” in written discourse. Although both groups sparingly used inevitable type stance markers, Chinese university students notably utilized “of course” more frequently, indicative of colloquial tendencies in their writing.

6. CONCLUSION

Based on the above analysis of the data, we can see native speakers typically prioritize presenting facts and providing evidence to bolster their arguments, aiming for persuasiveness and strength. Conversely, Chinese university students often display a tendency towards colloquialism in their essay writing, evidenced by their use of informal vocabulary. Consequently, for Chinese learners of English writing argumentative essays, it is advisable to maintain objectivity in presenting ideas and seek factual evidence to support viewpoints. Additionally, it's crucial to discern between formal and informal English and enhance critical thinking skills by engaging with academic texts in English.

7. FUTURE PROSPECTS

The significance of stance markers in English writing cannot be overstated. While our research has uncovered certain usage features, the constraints of our corpus and research subjects necessitate further investigation. We anticipate additional studies in this area to provide comprehensive conclusions and recommendations for Chinese college students, facilitating a deeper understanding of English vocabulary and writing.

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Opportunities and Challenges Faced in the Development of Rural Family Education in the New Era

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Abstract: The enactment of a series of educational policies and regulations signifies the entry of China's basic education into a new era. This paper explores new opportunities for the development of rural family education following the implementation of national policies and rural strategies. It also identifies the new challenges faced by rural family education in this new era, combining regional practices, and proposes strategies to address these challenges, aiming to assist in the development of family education in rural areas.

Keywords: New Era; Rural; Family Education; Opportunities and Challenges

1. Challenges Faced by Rural Family Education

1.1. The State Elevates Family Education to the Level of National will through Legislation

On October 23, 2021, the National People's Congress passed the "Family Education Promotion Law of the People's Republic of China", which was officially implemented on January 1, 2022. On January 1, 2022, the Family Education Promotion Law of the People's Republic of China was officially implemented. This law establishes the overall goals of family education; clarifies the principal status of families in carrying out family education; It strengthens the overarching theme of collaborative upbringing by families, schools, and communities; establishes a comprehensive mechanism for the promotion and development of family education, supported by national and local governments, related educational and scientific research departments, coordination among relevant social organizations and institutions, and constraints of applicable legal and regulatory provisions, along with oversight by corresponding functional departments. Additionally, it directs the focus towards areas such as patriotism education, moral and legal education, life skills education, health education, life education, and labor education as main threads, and recommends methods for the involvement of guardians within family education. The law, along with standards and guidelines developed by national, local governments, and educational research departments, lays a solid foundation for the top-down and macro-to-micro implementation of family education, further establishing a complete system for its implementation and providing substantial resources.

In rural areas, the law establishes the principal functions of village committees in the implementation of family education and their supervisory responsibilities over guardians within their jurisdiction. Taking into account the actual situation of rural areas, a series of service policies have been established, including the registration and assistance for left-behind and disadvantaged minors, providing learning and life support, and promoting entrepreneurship and employment support. For remote areas with weak capabilities in implementing family education and scarce educational resources, an information platform for family education has been established, relying on online courses, hotline services, and communication software. These measures lay the foundation for promoting the development of family education in rural areas.

1.2 Significant Improvement in the Overall Appearance of Rural Areas

Since the implementation of the Rural Revitalization Strategy, the appearance of rural areas has undergone drastic changes. A search of related reports on the "Learning Power" learning platform revealed that, as of September 2021, more than 530,000 villages have completed the reform of the rural collective economic system. The speed of China's rural economic development has been rapid, with the per capita income of rural residents and the urbanization rate climbing annually. The process of informatization has also accelerated, providing a material foundation for the development of rural family education. The increase in family income and the improvement in living conditions have inevitably led to a rise in the demand for family education and the ability to purchase services^[2]. In recent years, the infrastructure in rural

areas, such as cultural squares, sports venues, village libraries, digital information platforms, smart communities, and schools for parents, has been increasingly perfected. The continuous improvement of the living environment has also drawn a large number of families to participate, further providing the hard resources needed for the conduct of family education. With the spread of digital and smart devices in rural areas and the establishment of related communication media, there has been a noticeable increase in various lectures and training organized online and offline at the village grassroots level. Pushes of information in various fields including scientific knowledge, legal awareness, and policy facts. The continuous advancement of spiritual civilization construction is complemented by the incremental introduction and ongoing execution of various activities in rural areas, such as the selection of star-rated families, good daughters-in-law, and the promotion of good family traditions, these activities have also met the soft needs for the conduct of family education.

1.3 The “Double Reduction” Policy Leading to a New Pattern of Healthy Educational Development

In July 2021, Chinese government issued the “Opinions on Further Reducing the Homework and After-school Tutoring Burden for Students at the Compulsory Education Stage”. The “Double Reduction” policy has eliminated the main stubborn problems that have hindered the healthy growth of students in recent years. Firstly, it optimized the assignment of homework by schools, eliminating “internal worries”. Secondly, it regulated or abolished those utilitarian after-school tutoring institutions, removing the “external threats”. This has revitalized basic education, which had been obscured in recent years, and has created a vast space for the implementation of family education. On a micro level, the return of normal growth time and space for students can better pave a smooth path for the implementation of family education and provide a broad stage, as well as better maintain harmonious relationships between parents and children and stimulate the students’ innate potential. On a macro level, this lightened load has completely overturned the traditional utilitarian concepts that mainly pursue academic performance, scores, ranking, and examinations. It has greatly eased and eliminated the cognitive conflicts that arise from the pursuit of grades among schools, parents, and students, and has broken the long-standing default standards and concepts of talent in the entire society^[3].

2. Challenges Faced by Rural Family Education

2.1. Many Problems Still Exist in the Practice of Collaborative Education by Families, Schools, and Communities

The research interest in collaborative education involving families, schools, and communities has been quite high in recent years, and the significance of family education is undeniable. However, this type of collaboration, which requires systemic strength and anticipates participation and adjustment from multiple parties, has not yet formed a united force integrating theory and practice. At the societal level as a whole, there is not yet a consensus or significant public momentum, and among the many entities involved in national support and social collaboration, there is a lack of a leading figure. From the perspective of the most basic social participants, studies have indicated that under the “Double Reduction” policy, collaborative education among families, schools, and communities faces dilemmas of trust, communication, cooperation, and organization^[2]. Observations over the past two years reveal that these contradictions are notably more acute in rural areas than in cities, with ongoing issues such as slow shifts in overall mindset, delayed implementation of policies and regulations, and low collaborative capacity. In terms of regional collaboration, the collaborative consensus and understanding within the rural “township-village-school-family” implementation framework are evidently inferior to those within the urban “street-community-school-family” framework. Regarding the responsibilities of the main parties in collaboration, the division of labor is not yet clear, and the situation remains one where schools lead the way, families follow, and townships and villages merely observe.

2.2. The Scale of Professional Guidance Teams Does Not Yet Meet Comprehensive Needs

The quality and quantity of the family education guidance team are critical to the overall improvement of family education levels. If we consider the match between professional personnel and societal needs, current online references to Western standards suggest that China needs 2.5 million family education guidance personnel to meet the overall needs of family education, yet less than 20,000 people have obtained relevant qualifications or training certificates. According to the responsibilities outlined in the “Family Education Promotion Law of the People’s Republic of China” and the role of the family in education, each family should have at least one individual who is concerned

with family education and possesses certain relevant knowledge and abilities. From any perspective, the current number of family education guidance personnel in China is insufficient to meet the overall developmental needs of family education. Regarding the so-called “family education instructors”, public opinions such as “certifying organizations are inconsistent”, “the certification process is not difficult”, “fees are not low” and “the guidance role is minimal” lead us to question the “professionalism” of some individuals. If we compare family education guidance personnel to cells, then family education service organizations are like tissues, playing a crucial role in nurturing and training family education forces and linking the family education market.

2.3. The basic capacity of vast rural areas to respond to educational reforms is weak

On one hand, rural areas have not escaped the influence of long-standing historical environmental factors, and the underlying backwardness in family education concepts and levels has not significantly faded. The lack of an overarching educational perspective and systematic methods results in many family educations still acting as “grade chasers” and mere supplements to school education. The family education of the new era calls for the temporal and spatial extension across various academic fields, the three-dimensional construction of various organizational forms, and the intersection of knowledge, awareness, intention, and action. This sets high requirements for family capabilities, and it is clear that there is still a significant gap in the current capability levels of rural families. On the other hand, the tide of reform has swept across the country and begun to reshape the functional structure of families, impacting regional cultural identity and the personnel structure of educators in rural families. The high degree of shared information transmission, down to elementary school students, has become part of the mainstream observer group. In the tide of educational reform, the external comparison and feedback in parent-child interactions undeniably add to the acute conflicts in educational activities. The affectionate bonds under traditional education may become loosened, greatly increasing the resistance to the implementation of family education. The mobility of people also causes instability in the structure of family educators in rural areas. One or both parents may be unable to ensure continuous and stable family education activities due to labor migration, leaving behind children and grandparenting becoming a major problem in rural family education.

3. Countermeasures and Suggestions

3.1. Establish and Improve the Collaborative Organizational Structure

The foundation and most crucial part of collaborative family education in society must be grassroots collaboration, that is, the cooperation among schools, village committees, and families. The overall enhancement of their capabilities and levels will drive the overall improvement of societal awareness and action in family education. This requires that all grassroots entities be connected and activated. In terms of implementation and specifics, firstly, a unified collaborative organizational framework should be established, and responsibilities should be assigned and further refined to avoid isolated efforts and instead create a synergistic educational force. A supervision, collaboration, and feedback mechanism should be established with clear leadership and supervisory entities. This responsibility should be undertaken by the township governments and educational authorities, playing a bridge and link role, establishing connections between villages and schools. Then, through a series of activities, involve schools, villages, families, and relevant institutions, and social organizations and personnel, to form a consensus and understanding towards achieving unified goals. Schools should play a professional leading and activity coordinating role, acting as guides and adhesives for collaborative education, providing professional support for the family education venues and activities in villages, transmitting scientific and advanced educational concepts, and providing professional personnel. Village committees should avoid passive or bystander attitudes in the collaborative education process, earnestly fulfill their responsibilities under relevant laws and regulations, implement policy spirits, enhance the level of family education service facilities, discover, train, and inspire more collaborative personnel, improve family income-generating abilities and ensure family harmony. They should develop the ability to independently conduct community family education and actively coordinate with schools, families, relevant institutions, and social organizations to create a multi-dimensional development situation, serving as stabilizers and catalysts for collaborative education. Families should break down the mental barriers of long-term dependence on school education, enhance their family education capabilities, actively cooperate with schools, village committees, and related institutions and social organizations in conducting family education activities, and more actively engage surrounding

families to create a participatory atmosphere. At the same time, they should actively provide feedback, becoming the direct beneficiaries of family education.

3.2. Expand the Collaborative Team and Enhance the Capabilities of Related Personnel

The smooth progression of collaborative education among families, schools, and communities also faces the issue of an incomplete personnel system, with related responsible units lacking participation awareness and capability, and an insufficient number of existing personnel, most of whom rely solely on schools for support.

Currently, there is a strong call from the government and academic circles to strengthen the construction of the family education guidance team, which also indirectly reflects the undeniable fact of the insufficiency of collaborative education team members. Research has found that many micro-systems lack a leading figure, with many township responsible persons being relatively passive, and village committees often in a long-term vacuum, which is one of the important factors preventing the collaborative system from achieving synergy. According to the second article of the “Family Education Promotion Law of the People’s Republic of China” regarding the definition of family education, the family education guidance team should be a three-dimensional match of quality and quantity, as in “Among any group of three, there will be something I can learn”. The comprehensive development of children requires a full range of personnel to match and transmit knowledge, skills, awareness, and behavior, which is necessarily multidimensional. First, strengthen the weak links of townships and villages, it is key to guide the main responsible persons of townships and villages to play their due roles, establish related systems and boost their participation enthusiasm through incentives, performance evaluations, public opinion, etc., and guide them to actively play the role of community collaboration. Further enhance their participation ability through training, exchange, and visits. Secondly, conduct internal exploration and actively call retired teachers, industry experts, university graduates, and excellent student parents to join the ranks of the family education guidance team, stabilizing the internal support of the family education team, ensuring the long-term development of family education. Ensure external inflow, relevant functional departments should ensure personnel delivery, and townships and villages should attract and retain people effectively. The addition of external support is also an important means to rapidly improve the level of rural family education.

3.3. Enhance Rural Areas’ Basic Capability to Respond to Educational Reforms

First, break through the ideological barriers of rural families and reshape the concept of family education in rural areas. Form a new wave of thoughts favorable to the development of family education through a series of measures such as public opinion guidance, activity exchanges, and encouragement and supervision by schools and village committees, while efficiently activating rural resources favorable for conducting family education to ensure their full utilization. Establish long-term guarantee and supervision mechanisms to maintain and enhance development capabilities. Elevate the professional knowledge of main village leaders and student parents through a series of methods such as lectures, exchange meetings, and training classes. Identify differences between families and enhance family participation awareness through a series of observation and comparison activities organized by villages and schools. Enhance family education capabilities through face-to-face communication and guidance by advisory personnel with families. One important reason for the lag in rural family education levels compared to urban areas is the relative lag in economic development. Leveraging the momentum of rural revitalization to enhance the economic development capability of rural areas will bring more educational resources and a wider return and retention of the workforce, which will in turn continuously improve the conditions for the development of rural family education, both in terms of software and hardware. Clearly, governments at all levels, especially village grassroots organizations, must play a key role.

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Overview of the history of human cognition to the universe

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Abstract: Since the birth of the first telescope in 1608, the scope of the universe which human can observe has no longer been limited by sight. A few years later, the telescope was introduced into the field of astronomical observation by Galileo, Kepler and others, which led to a qualitative change in the development of astronomy. Over the next few hundred years, a wide variety of telescopes with different functions were created and used. In 1990, as the Hubble Telescope was put into use, mankind entered a new era : Observing the universe with astronomical telescopes. Nowadays, telescopes have moved beyond the limits of visible wavelengths to look at all wavelengths. Based on the development history of telescope, this literature review summarizes the research of human beings using telescope to explore and understand the universe. The main conclusion of this review is that the development of astronomy was done by different countries. Each country has made its own contribution at different stages of history. The Hubble Telescope is the epitome of multi-country exchanges and cooperation, This kind of Cooperation in the field of astronomical observation can be extended to different fields such as politics, culture, economy and sports, so as to better promote the progress of human civilization.

Keywords: Universe, Astronomical telescope, Celestial bodies

1. Introduction

Human's understanding of the universe is first obtained from observing various celestial bodies. The messages human receive when attending them come from electromagnetic radiation emitted by those bodies.

To be more specific, electromagnetic radiations from distant celestial bodies must pass through the Earth's atmosphere to reach the ground. In contrast, the atmosphere will cause strong absorption upon many bands of waves during this process. Those waves that the atmosphere did not absorb are in the visible wavelength range from 30mm to 1mm, which forms the atmospheric window, and the wavelengths of infrared light from 22 μ m to 1 μ m comprises the infrared window.

For a long time in the past, human observed the universe with their naked eyes in the visible light window. However, with the development of electronic telescopes, human began to make astronomical observations in the infrared window.

2. Development of human cognition of the universe

2.1 Optical telescopes

It is generally believed that the telescope was invented by the Dutch spectacle merchant Liebherr, the person who, in 1608, lined up a convex lens and a concave mirror to check the quality of the ground lens and discovered by chance that the spire of the church seemed to have become closer by using the two lenses to see clearly, which inspired the creation of the first telescope in human history. In the same year, he applied for a patent for his discovery and manufactured a binocular in compliance with the requirements of the relevant authorities(Cheng, 2009).

With the news of the invention of the optical telescope soon spread in European countries, Italian astronomer Galileo quickly made a telescope according to the principle, the objective lens is convex, aperture 4.4cm, focal length 1.2m, the eyepiece is a concave lens, magnification 33 times. Galileo used the telescope to observe the Moon, the Sun and other stars, discovered the position of Jupiter and its moons He also measured the period of sunspots in the same way(Gaiseanu, 2019). These crucial discoveries brought astronomy into the era of the telescope.

In 1611, Kepler, a German astronomer, built on the invention of his predecessor by using two biconvex lenses as an objective and eyepiece. This significantly increased the magnification of the telescope, and this optical system has since been called the Keplerian telescope.

At the present stage, people still use astronomical telescopes with the Keplerian type. It is essential to clarify that the telescopes used a single lens as the objective lens because of the limited technology and severe chromatic aberration. The telescope needed a lens with a minimal curvature to get a better observation effect, however, this would lead to a longer telescope body. Based on the difficulties, the redevelopment of the optical telescope also encountered a bottleneck.

In the mid-18th century, Duron studied the refraction and dispersion of glass and water, established the theoretical basis of achromatic lenses. He made achromatic lenses with coronet glass and flint glass, which solved the previous problem of severe lens chromatic aberration. Thus the long-bodied telescope was replaced by the achromatic refracting telescope. New difficulties accompanied the breakthrough. Due to technical limitations, it was challenging to cast more oversized flint glass (Grunert, 2022). As a result, telescopes widely used the lens length of 10 cm in the early days of achromatic lenses. At the end of the nineteenth century, with the improvement of manufacturing technology, there was a climax in the creation of large-diameter refracting telescopes, especially between 1885 and 1897, seven refracting telescopes of 70 cm or more were created, the most representative of which was the Yerkes telescope with an aperture of one meter and two centimeters created in 1897, whose advantages were long focal length, insensitivity to bending of the lens barrel, et cetera.

For the rest of time, optical telescopes have been moving toward larger sizes. In the 21st century, the new large-field telescope “LAMOST”, which China invented, is located at the National Astronomical Observatory Xinglong Observatory in Xinglong County, Hebei Province. In terms of technology, LAMOST adopts thin mirror active optics and spliced mirror active optics technology on the reflecting Schmidt correction mirror, which breaks the bottleneck of the world’s optical telescopes with large fields of view and large apertures. This technique makes China’s optical technology occupy an important position in the world.

2.2 Spectrum

Newton made rainbows by shining light through a prism, while Wollaston discovered dark lines when he broke down sunlight. J. Fraunhofer discovered that visible rainbows and incompatible dark lines were continuous. He named the arrangement of these rays Fraunhofer lines. He also proved that the Solar’s chemical component is the same as Earth, thus demonstrating that those tellurian chemicals can be found anywhere in the universe. This breakthrough was made by German physicist G. Kirchhoff, which laid the foundation of astrophysics.

The Harvard Observatory has been cataloging the spectra of stars for four decades, starting in 1886. They based their classification upon the law of identical spectral lines occurring on same-color stars and by ranking it in the order of decreasing temperature: O—B—A—F—G—K—M, G—R—N, K—S. The main sequence ranges from O to M, and the O-type stars have the highest effective temperature while the M-type stars are the most freezing. Every type of star is additionally sorted into ten quadratic forms. For example, the hottest star of B-type is B0, and the coolest is B9. It is worth noting that there are embranchments in star types G and K, respectively R and N, and S. R-type and N-type stars contain carbon majorly, while S-type stars contain mostly cryogenic heavy metal.

In 1905, Denmark astronomer E. Hertzsprung discovered that there are some stars with very low luminosity and some stars with very high luminosity in K-type and M-type. He called the former “dwarf star” and “giant star”. In 1911, Hertzsprung determined the luminosity and color of several galactic clusters. Establishing a plane cartesian coordinate system concerning these two quantities marked the points representing stars. He found that most stars appeared on a continuing belt while others appeared in small groups. American astronomer H. Russell sketched a diagram while studying spectra and luminosity in 1913. By comparing those two graphs, people found out that color is equivalent to spectral pattern or surface temperature. This figure type was then called by a joint name—Hertzsprung-Russell Diagram, which has an x-axis for the spectral type or temperature or chromatic index a y-axis for luminosity or absolute magnitude. There are three main stellar religions shown in the diagram, representing three main kinds of stars. The main sequence is the belt through the left side to the right, which contains main sequence stars—stars that take up 90% of our observation, which is the most stable phase of a star’s life. There are red superstars on the top right corner, the massive stars in a milky way, formed after a star departs the main sequence. Down at the left corner, where stars finally evaluate to the last stage—the white dwarfs, it is only 40 million times the size of our Sun. The HR diagram allows scientists to speculate about stars’ evolution and classify discoveries (Velmans, 2021).

2.3 Radio telescope

In 1932, Karl Guthe Jansky in Bell Telephone Laboratories discovered the first radio radiation from the galactic centre. During World WarII, radio workers detected solar radio accidentally. These radar technologies were applied to astronomical observations after WWII kick-started the development of radio astronomy.

In 1942, during World WarII, a British radar operator detected an intense low-frequency solar burst. However, the information was kept secret because it was potentially valuable in evading enemy radar until the war finished. In 1944, the radio emission from the Sun was first discovered by Grote Reber. One of the most important discoveries of the solar radio emission is that the radiation that the Sun produces is way higher than that of the standard black body radiation, as expected. In 1946 Vitaly Ginzburg proposed an explanation for this which indicates that thermal bremsstrahlung emission from a million-degree corona was responsible, and the later radio data have proved the idea.

After James Chadwick discovered the neutron in 1932, Lev Landau indicated that protons and electrons might combine and form neutrons in high temperature and pressure. So it seems possible that there exists a star made entirely of neutrons, which is named neutron star. In 1934, two European Astrophysicists, Walter Baade and Fritz Zwicky proposed that neutron stars can result from supernova explosions. In 1939, American physicists J. Robert Oppenheimer and George Volkoff established the first quantitative neutron star model.

In 1967, British astronomer Anthony Hewish and his graduate student Jocelyn Bell Burnell discovered radio pulsar. At that time, the two astronomers built up a substantial long wave receiving antenna array to search for cosmic radio flickers. Since July, 1967, the apparatus has worked on waves with a 3.7-meter wavelength and 81.5 MHz frequency, and Bell is mainly responsible for data processing. After a month of data collecting, Bell spotted a specific signal fluctuation in 30 meters of paper tape every day. It is like some regular pulse without flickers. On November 28, Bell finally determined the existence of a pulse signal with a period of 1.337s. After a series of experiments, Bell and Hewish concluded that this signal came from a place beyond the solar system, with no more significant source than Earth. After ruling out the possibility of an alien signal, Hewish and Bell verified that the signal came from pulsars (PSR)—a theoretical neutron star. (Nather et al., 1990).

From 1948 to 1960, a few hundred radio galaxies were discovered; those galaxies are millions of times more potent than normal optical galaxies. Different from the results of optical observations, which consider galaxies as a relatively stable star system, observations from all length shows that activity is expected in galaxies but varies in size. Those galaxies with a remote activation are defined as normal galaxies, and 2% of galaxies with a tempestuousness activation are defined as active galaxies.

On May 20, 1964, American radio astronomers Robert Wilson and Arno Penzias confirmed the existence of cosmic microwave background radiation (CMB), which provided a piece of solid evidence to support the Big Bang Theory. They made this discovery by accident when doing the absolute measurement of celestial radiation in Bell Lab's Holmdel Horn Antenna. To decrease the noise level of the antenna, they did a series of examinations. Robert and Arno estimated that the radiation when they pointed to the antenna should only be 0.3K. However, then they found out that the result was that there was striking 6.7K radiation, and the radiation was independent of the direction.

Another problem of the galaxies is how the arms formed. Physical models tell that if the arm contains fixed stars and gases, the arm will tighten as the galaxy is spinning. On the contrary, observations tell that in all the spiral galaxies, the shape and size of the arm do not change with time. The explanations for this were proposed in 1963 according to Chinese-American scientists Jiaqiao Lin and Xiasheng Xu. The theory holds that the perturbation of gravitational potential due to the overall rotational velocity and spatial density distribution results in the formation of density waves; the dense crest forms the cantilever. Although the image shows the arms are static, the stars and gases are going in and out of it at any time.

In the 1930s, three types of interstellar molecules, CH and CN have, were identified. Since people thought they were scarce and would be ionized quickly by ultraviolet radiation from the stellar, those molecules have no astrophysical significance. However, after discovering the radio 21cm line, people began to find interstellar molecule OH. Hydrogen is the most abundant element in the universe, and the abundance of oxygen is not low.

2.4 Space telescopes

Because of the atmosphere, we can only use radio, visible lights, and infrared windows to observe the ground, which greatly people's exploration of the universe. Even at visible light bands, the observations are interrupted by the transparency of the atmosphere and city lights. While upon the atmosphere, at altitudes of more than 100 kilometres, it is entirely free of the influence of the atmosphere, which is possible to carry through long-time, full-wave band observations.

The Hubble Space Telescope(HST) is the most well-known space telescope in visible light bands. It was sent to space on April 25, 1990 by space shuttle "Discovery" and remained in operation. The telescope's primary mirror has a diameter of 2.4 meters, a length of 13.6 meters, and a ground weight of 12.5 tons. It mainly works in visible light bands, and it can also be partly used in parts of observations in ultraviolet and infrared light range.

Another famous telescope is the Kepler Space Telescope, the first space detector used to search for Earth-like planets outside our solar system. The telescope was sent to space on March 7, 2009, and it has empathetic detection capabilities. Since the telescope came into operation, it has discovered five extrasolar planets. Until today, more than 1200 extrasolar planets have been found by Kepler Space Telescope, with 54 planets in the "habitable zone"(Tyson,2002)

The main target of microwave observation is cosmic microwave background radiation. On November 18, 1989, satellite COBE(Cosmic Background Explorer) was launched by NASA. Researchers obtained results from the satellite in a short period of time. Those results confirmed that the early universe was a hot universe, supporting the Big Bang theory. Later, on June 30, 2001, satellite WMAP(Wilkinson Microwave Anisotropy Probe) was sent to space to do more accurate explorations of the cosmic microwave background radiation. On June 14, 2009, the European satellite PLANK was launched, with a sensitivity ten times more than COBE. Its results are used for the discovery of the origin of the cosmic.

To explore the atmosphere where ultraviolet cannot go through, people use different kinds of space observation equipment. Far Ultraviolet Spectroscopic Explorer satellite(FUSE) was launched in 1998. It was used to study the abundance of elements in the universe, the interstellar medium, and stellar atmospheres to find out the chemical evolution process of the universe.

The two fields of study in X-ray bands and γ - ray bands are the youngest in astronomy. Satellite Uhuru is the first satellite used to make X-ray observations, and it found 339 strong X-ray emitting objects in the first all-sky survey. After Uhuru, NASA's HEAO project used grazing imaging technology to obtain the first X-ray image of a celestial body. After 1990 satellite ROSAT was launched, 150,000 X-ray sources were discovered. AXAF and XMM-Newton's data of X-ray spectrum and X-ray objects are used on studies about late stellar evolution, the detection of black holes, and dark matter(Leane et al,2021)

The first γ -ray satellite, Explorer XI weighed only 30 pounds. After that, the satellites and instruments sent to space become more sensitive and heavier. Those apparatus detected thousands of cosmic gamma-ray bursts and provided essential data for high-energy astrophysics research.

3. Conclusions

1. The promotion of astronomy for the progress of human civilization and the development of natural science is mainly reflected in two aspects: Firstly, astronomical observation provides basis for the establishment of major scientific theories and tests their correctness; Secondly, in the process of understanding the earth, life and its place in the universe, the new astronomical observations have gradually and continuously changed the whole human view of the universe. The search for extrasolar planets and life will be driven by our innate curiosity and thirst for knowledge.

2. The study of the motions of celestial bodies in the solar system directly led to the establishment of Newtonian mechanics system, which forms the theoretical foundation of the first scientific and technological revolution. More recently, both dark matter and dark energy have been discovered in astronomical observations. The study of black holes is the core problem of quantum gravity theory. Once these problems are solved in the future, the basic theory of natural science will be greatly promoted. The progress of basic theory is a necessary condition for the advancement of human science and technology.

3. The development of the Hubble telescope included many European countries, and several major European countries in the development of modern civilization have shown through the Hubble telescope development to have closer technological and cultural exchanges. It also contributed to the outstanding achievements made in other fields of science later on. The Hubble telescope is only a microcosm of this exchange and cooperation that has expanded into different fields such as politics, culture, economy and humanities.

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Analysis of English translation skills of Chinese mobile phone advertisement from the perspective of the skopos theory

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Abstract: As a special style, advertisement has an essential role in the promotion and sales of goods. In recent years, some Chinese electronic enterprises such as Huawei, OPPO, Xiaomi, Honor and other successful companies have made brilliant achievements in their internationalization. As a result, studying the above brands of mobile phone advertisement translation will bring timeliness and representativeness. Under the guidance of the skopos theory, this paper selects some typical advertisement of Chinese mobile phone companies such as Huawei, VIVO, OPPO, Xiaomi and other mobile phone companies for analysis. Similarly, it also summarizes the basic characteristics of mobile phone advertising writing. Besides, it generalizes the English translation skills of mobile phone advertisement. It can provide reference for those who study this field.

Keywords: advertising translation; the skopos theory; advertising style; advertising English

1. Introduction

As a big import and export country, under the encouragement of the policy, China's enterprises and commodity economy have been well developed since the Reform and Opening up. At the same time, in recent years, the deep development in China's science and technology and manufacturing industry has also leveled up the share of products made in China, especially in communication tools, Huawei mobile phones, Xiaomi, OPPO, VIVO and other domestic brands have gone abroad. The achievements of these brands in foreign countries are not only with their own solid technology and excellent product performance, but also inseparable from advertising publicity. However, due to the differences between China and English-speaking countries in terms of language and culture, the words in English translation of advertisement are worth pursuing. Besides, the mobile phone professional vocabulary also brings challenges to Chinese translators. As a result, translators should flexibly use translation skills to deal with different goods, so the skopos theory can be a guiding role in the study of English translation of mobile phone advertisement.

2. Concepts of advertisement

Advertisement is widely used to inform the public about the emergence and development of something. It in Cambridge dictionary is stand for a picture, short film, song, etc. that tries to persuade people to buy a product or service, or a piece of text that tells people about a job, etc. As a result, advertisement can be divided in the broad sense and narrow sense. Firstly, the advertisement in narrow sense is a kind of propaganda language tailored for goods in order to sell their goods, which is also called commercial advertisement. While the advertisement in broad sense refers to some statements and initiatives of the government, religious associations, and social organizations, and these advertisements are not for the money and profits. Its function is to introduce, agitate or lobby.

There are many types of advertisement, according to the content, there are mainly commercial advertisements, industrial technology advertisements, job recruitment advertisements, public service advertisements. No matter what type of advertisement, it determines the special style of the advertisement that is different from other application languages.

3. Introduction of the Skopos theory

The skopos theory is the core of functionalist translation theories. Skopos is the Greek word for "purpose, aim, goal". It was Proposed by Reiss and subsequently refined by H.J. Vermeer in the 70s of the 20th centuries. In skopos theory, the "skopos rule" is regarded as the top-ranking rule. Skopos theory focuses above all on the purpose of the translation, which determines the translation methods and strategies that are to be employed in order to produce a functionally adequate result.

Apart from the "skopos rule", there are two important subordinate rules: the "coherence rule" and the "fidelity rule". The "coherence

rule” states that the TT must be interpretable as coherent with the TT audience’s situation.” In other words, the TT must be translated in such a way that it is coherent for the TT audience, given their circumstances and knowledge. The “fidelity rule” merely states that there must be coherence between the TT and the ST (source text) .

Skopos theory highlights that the translation strategy is decided by the purpose of the TT which is mainly fulfilled by the target addressee—the intend target audience’s demand with their cultural-specific knowledge and their expectations.

4. Characteristics of advertisement in Chinese mobile phone

4.1 Plenty Chinese four-character phrases

With profound language and culture of Chinese, Various Chinese four-character phrases are employed in the advertisement. They are simple and easy-understanding for domestic people. The publicity effect is pretty good. For example, In Huawei Mate50Pro, the translation introduces the by using four Chinese characters “领势”. They generalizes overall features of the Mate50’s ---- 领势设计、领势性能、领势影像、领势体验 “观感出众，屏屏出彩”describes the clear and transparent view of the screen and outstanding picture quality. “虚实结合，一拍即合” highlights the updated and powerful photo function. With more portrait and natural picture protagonist three-dimensional sense of prominence, it meets some female customers to take pictures for beauty.

4.2 A number of homophonic Chinese characters

As a fashionable and practical product, updates are commonplace for mobile phone in modern times. If the sellers want to capture the love of consumers, they need to use some innovative words in the advertisement. For example, In Huawei Nova10pro, “你的光芒，随10闪耀”。“时”is changed to the Arabic numeral 10. It directly insists that Huawei nova10 will always makes you happy. ““开启芯算摄影时代”in OPPOFindX5’s mainly introduces its self-developed featured NPU chip, which opens a new mode of photography. OPPOFindX5 “opens the era of photography” mainly introduces the special NPU chip developed by itself, which opens a new mode of photography, and the“心算”and“芯算” just correspond to each other. innovative vocabulary draws the psychological distance between sellers and customers closer. And a sense of familiarity will slowly ferment, in addition to a sense of fashion and freshness.

4.3 Colorful technical words

In addition to fashionable and practical, mobile phone is essentially a high-tech product. As a result, the advertisement will involve some professional terms, such as “P3 wide color gamut, 2000+ color tuning” the layman may not know what these numbers and vocabulary refers to, but the insiders can see at a glance that they are the terms of phone photographic.

5. Translation skills of mobile phone advertisement

5.1 Restructuring

Advertisement in mobile phone is mainly characterized by the use of Chinese four-character phrases. Definite literal translation probably brings risk of misinterpretation. Besides, it doesn’t align very well with the simplicity in English. So, the translator basically restructuring original language structure. For example, in Huawei Mate50, the phrase“巍巍昆仑，巅峰之作”is translated into “An instant classic, “巍巍昆仑，巅峰之作”is used for describing Mate50’s appearance, which brings Huawei’s latest Parisian stud design concepts to phones. Based on the dawn and sunset of the Kunlun Mountains, the workers design three colors: frost silver, obsidian black, and flowing purple. “An instant classic” reflects a kind of mystery. Because the Kunlun Mountain is a mysterious mountain with many creatures and secrets.

5.2 Omission

The numeral translation involved in advertisement are not translation. Translator mainly uses omission to make the language more fluent. For example: “这一面，精彩每一面”. It was translated into “Immersive and Impressive”, which here mainly describes the phone’s folding screen. Similarly, “Immersive and Impressive” not only readable, but also express its meaning completely. “精彩的沉浸式体验；流

光四曲，视网膜级屏幕” is translated into “Glow with the 1.5K AMOLED Screen”.

6. Conversion

Generally, there are many verbs in a sentence. Some verb phrases, conjugated phrases, etc. can act as various components of a sentence without changing the form. However, the verbs in English are often weakened, and they are usually transformed into noun forms or adopt the form of non-predicate verbs to express the meaning of the verb. As a result, English is a static language and Chinese is an active language. In the translation of advertisements, some sentences reflect this feature. For example: OPPO Find X2 系列设计简约纯粹，触感优雅柔和。若有似无的曲线抚平机身的每一处棱角，双曲面机身演绎立体圆润的顺畅手感。拿起它，感受从眼前到指尖的舒适。The translator translated it as Beauty Beyond the Visual. Find X2 series features a simple, tangible elegance that takes off the edge. with smoothed curves that fit perfectly in with smoothed curves that fit perfectly in your hand, this is a beauty you can feel from your eyes to your fingertips. This sentence mainly describes the smooth and comfortable external feel of the OPPO Find X2.

7. Amplification

According to the custom of the Chinese, the possessive pronouns “you” and “your” do not appear frequently. In most advertisements, second person pronouns are used to reduce the distance between the customer and the seller. English often expresses the deeper meaning clearly through the form of language. For example: Reno Glow 晶钻工艺 银河就在手中。映入眼中的是银河般的闪耀，手指抚过却顺滑无比。The translator translates it as “Reno Glow Hold a galaxy in your hand This phone’s unique finish is silky to the touch and it looks like you have all the stars of the universe in the palm of your hand. universe in the palm of your hand”. The personal pronoun “you” and the possessive pronoun “your” are added for making the consumer feel that the seller is providing one-on-one service. The intimacy between the seller and the consumer unfolds at the same time. And this expression also caters to the characteristics of western consumers in the pursuit of individual feelings.

8. Conclusion

C-E translation of Chinese advertisement plays an important role in the process of promoting Chinese-made phone products. Translators should take introducing and publicizing the products, talking to consumers and promoting the sales of commodities as the fundamental purpose. Besides, the methods and strategies according to the differences between English and Chinese are also determined. Then respect the linguistic habits and rules of English-speaking countries, on the basis of which they can innovate the translation to prompt consumers to accept these texts and make purchases.

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Does investor sentiment influence gambling behavior? Evidence from the Chinese stock market.

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Abstract: This study examines the influence of investor sentiment on stock market gambling behavior using Chinese stock market data from January 2019 to December 2021. The research reveals a positive impact of investor sentiment on gambling behavior, particularly amplified after the onset of the COVID-19 pandemic. Non-cyclical stocks demonstrate a heightened susceptibility to investor sentiment compared to cyclical stocks. Additionally, the study identifies gambling behavior as a positive mediating variable in the relationship between investor sentiment and stock returns.

Keywords: Investor sentiment, Gambling behavior, Social media, stock return

1. Introduction

Stock market investment behavior resembles gambling, as investors invest a lesser amount with the anticipation of substantial returns (Markowitz, 1952)^[7]. Prior research has identified factors influencing this behavior, encompassing age, education, and gender (Kumar, 2009)^[10]. Kumar (2011)^[11] observed the impact of religious beliefs on fund managers' gambling behavior. Additionally, literature has explored the influence of investor sentiment on 'irrational behaviors,' such as herding behavior. Fotini Economou et al. (2018)^[5] assessed investor panic, while Liao et al. (2011)^[13] established a significant positive correlation between daily investor sentiment and fund managers' herding behavior. The literature review indicates a notable absence of specific articles examining the influence of investor sentiment on gambling behavior. Consequently, this paper posits that an investigation into this relationship can significantly augment stock market participants' understanding of investors' psychological preferences, thereby deepening their comprehension of stock market operations.

This study makes several key contributions. Firstly, it addresses a significant gap in existing literature, which has not consider the impact of investor sentiment on such behavior. Secondly, the paper introduces a novel mechanism for the influence of investor sentiment on stock returns. Thirdly, As of 2023, natural person investors constituted 99.76% of total investors in China. Therefore, this study's emphasis on the Chinese market is instrumental in studying the impact of investor sentiment on gambling behavior, holding significant implications.

2. Data & methodology

2.1 Data and variables

The temporal scope of this paper is defined as spanning the years 2019 to 2022. For this research, sample stocks were chosen from the CSI 300 and CSI 500 indices. The data underwent meticulous processing: the exclusion of companies undergoing movements as well as those suspended for over 30 consecutive days. This process resulted in the identification of 365 sample stocks. The data utilized in this study originated from the Oriental Fortune Stock Bar, CSMAR and Wind.

Initially, web crawler technology was employed to systematically crawl and store content. Subsequently, the crawled text underwent preprocessing, involving the removal of deactivated words after word segmentation. Data with null time entries were also excluded, and topic posts containing information and research reports were filtered out. For sentiment analysis, this paper utilized the Zhi.com Hownet sentiment dictionary, the National Taiwan University ntusd sentiment dictionary, and so an. These resources collectively contributed to the creation of a comprehensive sentiment lexicon. Ultimately, this process culminated in the generation of the monthly sentiment index.

2.2 Methodology

The paper's explained variable is the gambling index of individual stocks, as elucidated by Kumar (2009)^[10], Bali et al. (2011)^[2], and Kumar et al. (2016)^[12]. This section employs a brief panel fixed effects regression, with both individual fixed effects and time-fixed effects

fixed. The formula are presented below.

$$Gamble_{i,t} = \left(\frac{IVRank_{i,t}}{N} + \frac{MAXRank_{i,t}}{N} + \frac{PriceRank_{i,t}}{N} \right) / 3 \quad (1)$$

$$Gamble_{i,t} = \beta_0 + \beta_1 Senti_{i,t} + \beta_2 Beta_{i,t} + \beta_3 ILLIQ_{i,t} + \beta_4 Lnsiz_{i,t} + \beta_5 Leverage_{i,t} + \beta_6 Ret_{-1,t} + \beta_7 Ret_{-2,-12,t} + \mu_i + \lambda_t + \varepsilon_{i,t} \quad (2)$$

Where and represent the Intuitive Gambling Index and Investor Sentiment for stock i in month t, respectively. Control variable choices are informed by Hai et al. (2020)^[6]. measures of stock price volatility. refers to Amihud's (2002)^[11] study. is calculated as the ratio of total liabilities to total assets. is the return on stock i at month t-12 to the average return on the index in month t-2. is the return on stock i at month t-1 (Jegadeesh et al, 1993)^[9].

3. Analysis of regression results

Table 1 illustrates a positive correlation between the individual stock investor sentiment index gambling index and gambling behavior, with coefficients reaching 0.104. This suggests that the intuitive gambling index is notably influenced by shifts in the mood of individual stock investors. The findings indicate an escalation in gambling behavior as individual stock investor sentiment rises.

The fixed effects regression coefficients for individual stock investor sentiment, measured by Gamble, on individual stock gambling behavior are 0.225 and 0.538 before and after the COVID-19 pandemic, respectively. Both coefficients exhibit significance at the 1% confidence level. This suggests that, following the epidemic, the macroeconomic environment and individual incomes experienced negative impacts, potentially leading to a shift in investment mentality towards increased risk-taking and speculative behavior as a means to offset losses.

Cyclical and non-cyclical stocks exhibit regression coefficients of 0.109 and 0.099, respectively, concerning individual stock investor sentiment measured through Gamble. Non-cyclical industries, predominantly linked to the national economy and greater information transparency. Consequently, investors demonstrate less caution in decision-making. Hence, this trend results in a heightened inclination towards investing in non-cyclical stocks, thereby amplifying the influence on gambling behavior.

This paper performs robustness tests, employing ISkew. Subsequently, empirical analysis utilizes two-stage least squares (2SLS). The results, though not presented here due to space limitations, maintain their robustness.

Table 1 Empirical regression results

		Pre-COVID	Post-COVID	Cyclicals	Non-Cyclicals
	(1)	(2)	(3)	(4)	(5)
	Gamble	Gamble	Gamble	Gamble	Gamble
Senti	0.104	0.225	0.538	0.109	0.099
	***	***	***	***	***
beta	0.014	-0.003	0.004	0.017	0.010
	***	(-0.37)	(1.23)	***	***
ILLIQ	-2.236	-1.756	-1.579	-2.258***	-2.232
	***	***	***	***	***
Lnsiz	-0.051	0.097	0.077	-0.050	-0.052
	***	***	***	***	***
Leverage	0.015	0.264	-0.058	0.019	0.008
		**			
	0.262	0.010	0.134	0.283	0.242
	***		***	***	***
	0.698	-0.883	-0.218	0.728	0.659
	***	***	**	***	***
Constant	0.974	-0.633	-0.177	0.962	0.99
	***	**		***	***

Note: *, **, *** represent statistical significance at 10 percent, 5 percent and 1 percent, respectively.

4. A study of the mediating effect of gambling behavior in investor sentiment affecting stock returns

4.1 Methodology

The literature indicates a substantial impact of investor sentiment on stock returns (Brown et al., 2004^[3]). Multiple regression models, following the approach outlined by Baron et al. (1986)^[4], are employed to assess the mediation effect.

$$Yield_{i,t} = \alpha_0 + \alpha_1 Senti_{i,t} + \alpha_2 Beta_{i,t} + \alpha_3 ILLIQ_{i,t} + \alpha_4 Lnsiz_{i,t} + \alpha_5 Leverage_{i,t} + \alpha_6 Ret_{-1,t} + \alpha_7 Ret_{-2,-12,t} + \mu_i + \lambda_t + \varepsilon_{i,t} \quad (3)$$

$$Yield_{i,t} = \mu_0 + \alpha'_1 Senti_{i,t} + \delta_1 Gamble_{i,t} + \mu_1 Beta_{i,t} + \mu_2 ILLIQ_{i,t} + \mu_3 Lnsiz_{i,t} + \mu_4 Leverage_{i,t} + \mu_5 Ret_{-1,t} + \mu_6 Ret_{-2,-12,t} + \mu_i + \lambda_t + \varepsilon_{i,t} \quad (4)$$

The monthly return of individual stock i in month t is denoted by $Yield_{i,t}$. The control variables align with those mentioned above.

4.2 Analysis of empirical results on the mediating effect

The results, though not presented here due to space limitations. It reveals the significance of coefficient α_1 when assessing the overall impact of individual stock investor sentiment on individual stock returns. Furthermore, coefficient δ_1 is significant. Notably, the direct effect maintains significance even with the regression coefficient of the gambling index being 0.285 for gambling. Gambling behavior serves as an indirect variable in the relationship between investor sentiment and stock returns. Investor sentiment positively shapes stock market gambling behavior due to cognitive constraints in a complex stock market environment. Subsequently, gambling behavior directly impacts the stock price, volatility, and yield of a stock through share subscription and selling (Mobeen Ur Rehman, 2021)^[8]. In summary, investor sentiment positively affects stock returns by influencing gambling behavior.

5. Conclusions

This paper investigates the correlation between investor sentiment and gambling behavior in the A-share market through the lens of behavioral finance. The findings can be summarized as follows: (1) a noteworthy positive correlation exists between investor sentiment and gambling behavior; (2) the impact of investor sentiment on gambling behavior has intensified in the wake of the COVID-19 pandemic, with non-cyclical stocks exerting a more pronounced influence than cyclical stocks; (3) gambling behavior serves as a positively partial mediator in the relationship between investor sentiment and stock returns.

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The Influencing Factors and the Countermeasures of the Construction of County-level Close-knit Medical Communities: A Case Study of District Q, Chongqing Municipality

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Abstract: The implementation of the Healthy China strategy requires optimizing the distribution of medical resources and enhancing the capacity of primary healthcare services. The construction of closely-knit medical communities at the county level is a crucial step to achieve this goal. However, In practice, various factors have constrained the effective construction and function of medical communities, leading to difficulties in meeting the requirements for equalized services.

Research has found that informationization construction and the innovation of management mechanisms are two core factors influencing the effectiveness of medical community construction, while financial investment and talent allocation serve as essential conditions. Policy and regulatory supports provide the necessary external environment for the construction of medical communities. Based on these backgrounds, this paper proposed targeted countermeasures and suggestions, including increasing financial input, optimizing talent incentive mechanisms, accelerating the construction of information platforms, and promoting innovation in management systems and operational mechanisms.

Keywords:Medical Community; Healthy China; Grassroots County Area

1. Research Background and Significance of Close-knit Medical Community Construction

1.1. Research Background:

To deeply promote the construction of “Healthy China,” in 2019, the Chinese government began to pilot and promote the construction of close-knit county-level medical communities nationwide. In 2023, the National Health Commission and other departments jointly issued the “Guiding Opinions on Comprehensive Promotion of Close-knit County-level Medical and Health Community Construction,” proposing new requirements for the reform of county-level medical care. In recent years, District Q has vigorously promoted medical reforms, issuing the “three-access” construction plan and the bidirectional referral management system for medical and health communities, and establishing regional medical communities Pilot projects for close-knit medical communities have been carried out between the district central hospital and Yongcheng Health Center, and the sense of gain in medical care among the people in Q district has been improved. However, in practice the integration of responsibilities, management, services, and interests at districts, towns (streets), and villages has not been truly realized.

1.2. Research Significance:

Exploring and promoting the construction of close-knit medical communities in counties not only has important theoretical value for optimizing the allocation of medical resources and enhancing grassroots medical service capabilities but also has profound practical significance for realizing equalization of medical services and building a harmonious society.

Therefore, this study focuses on the construction of close-knit medical communities in counties, aiming to propose innovative viewpoints and strategies for making positive contributions to promoting equalization of medical services in China and strengthening the development of grassroots health undertakings.

2. Factors Affecting the Promotion of Close-knit Medical Community Construction

Based on the author’s actual visits and investigations, in District Q, two tertiary hospitals currently lead the formation of regional medi-

cal communities, but there are overall issues such as “inadequate system mechanisms,” “insufficient supply of medical resources,” and “uneven medical standards.”

2.1. Inadequate System Mechanisms

In the process of promoting the construction of close-knit medical communities, inadequate system mechanisms pose a significant problem that mainly manifests in the disconnect between existing policy frameworks and actual needs, as well as the lack or imperfection of cooperation mechanisms among medical institutions at all levels. The implementation details and operational guidelines of policies often fail to address the practical issues resulting in difficulties at the implementation level and an inability to effectively meet the specific needs of grassroots medical services.

Firstly, the systemic management mechanism is still incomplete. Currently, the construction of county-level medical communities is a loose alliance. It relies more on self-awareness to operate, and the unification of personnel, finances, and materials within medical communities has not been truly achieved. Secondly, the reform of town-hiring and village use has not been fully implemented. The construction of medical communities requires the exploration and implementation of the “town hiring and village use” model for rural doctors. However, the “town hiring and village use” reform in District Q has not been formally implemented yet. Village health clinics operate independently of township health centers. Thirdly, the tiered diagnosis and treatment mechanism needs to be improved. Although District Q has introduced a bidirectional referral management system for medical communities, there is a lack of specific indicators, incentive constraints, and other mechanisms. Moreover, the concept that “big hospitals are better” is rooted among the masses, with the majority of patients still preferring tertiary hospitals for treatment. The proportion of downward referrals is low, with less than 3% of patients referred to district-level medical institutions and only 0.79% referred to the district Chinese medicine hospital in 2018.

2.2. Insufficient Supply of Medical Resources

In discussing the promotion of close-knit county-level medical community construction, one cannot overlook the shortage of grassroots medical resources. This challenge is manifested in several aspects:

The key focus of the new medical reform is on the rational allocation of resources. However, research has found gaps in this aspect in District Q. Firstly, there are issues with personnel deployment. Mechanisms such as regular visits and dispatched diagnoses by township health centers have not been established. The alignment between the medical personnel dispatched through the “town hiring” policy and the needs of grassroots communities is low. For example, in 2023, The New Sheng Health Service Center applied for a traditional Chinese medicine doctor but received a hematologist instead. Family doctors have not played a practical role, with only 5% of respondents indicating that they have been visited by a family doctor. Secondly, there are shortcomings in resource sharing. The implementation of Internet platforms has been slow, and the application effects of the three district-level Internet hospitals built so far have been poor. From January to October 2023, the total number of diagnoses and treatments in the district’s Internet hospitals was only 1,863, with only 270 from the People’s Hospital. Data utilization is low, with 9,831 out of 24,471 chronic disease diagnoses sent through the medical and health linkage remaining unprocessed. Thirdly, there is a reluctance to participate in operation. The amount of debt and asset-liability ratio of public medical institutions in District Q has been increasing year by year. As of September 2023, the average asset-liability ratio of 26 public medical institutions in the district was 55.84%. Moreover, only retired personnel expenses are guaranteed out of the six inputs from the government to public hospitals, leading to some public hospitals being unwilling to participate due to the need to “earn money” to sustain operations.

2.3. Uneven Medical Standards

what cannot ignore is the significant differences in medical service standards between different regions. Specifically, there are significant disparities in medical service facilities, professional staffing, and technological applications between urban and rural areas, as well as between central and remote areas.

According to research, there are different shortcomings in medical institutions at all levels in District Q. Firstly, there is limited

high-quality medical care. In the current treatment fees of the two tertiary hospitals, the proportion of rehabilitation therapy and laboratory tests is high, while treatments such as radiotherapy and surgery for major illnesses are lower than the city's average. For example, the District People's Hospital only performed 59 daytime surgeries, accounting for only 8.33% of the recommended catalog (2022 version). Among the 23 grassroots medical institutions in the district, only 6 are rated as A, 10 as B, and 7 as C, which are far from meeting the requirements of higher-level institutions. Secondly, there is a shortage of professional talents. There is a widespread lack of education, titles, and technical expertise among medical personnel in grassroots medical institutions. By the end of 2023, only 14.62% of high-level technical personnel were in grassroots medical institutions. Among 383 rural doctors in the district, only 6.78% were practicing physicians, 72.58% had education levels below college, and 44 doctors were over 60 years old. Thirdly, infrastructure lags behind. Most equipment in grassroots medical institutions is outdated, and essential diagnostic and treatment equipment such as CT, DR, and ventilators are lacking. Platforms for bidirectional referral data sharing and regional diagnosis and treatment centers have not been established. More than 10 grassroots medical institutions can only set up fever clinics in container form due to limited conditions.

3. Countermeasures and Suggestions for Promoting the Construction of County-Level Close-Knit Medical Communities

3.1. Increase Financial Input and Optimize Fund Allocation

Firstly, the government should actively seek financial support in accordance with the "Six Major Inputs" requirements for public medical institutions. Based on the allocated funds and considering the debt and operational reality of medical institutions, funds should gradually be allocated to corresponding public medical institutions for debt clearance. Health departments at the district level should actively strive for municipal-level health projects and explore diverse capital participation mechanisms such as equity financing, project financing, social donations, and contributions from medical institutions.

Secondly, it's essential to clarify investment priorities. Funds should be primarily used to enhance the capacity of primary healthcare institutions, especially in key areas such as talent development, equipment renewal, and informatization construction. Additionally, attention should be paid to infrastructure construction to ensure that patients can access quality and reliable medical services nearby.

Lastly, enhance the transparency and supervision of fund utilization. Establish an open and transparent financial management system to subject fund usage to scrutiny by various sectors of society, preventing misuse or misappropriation of funds and ensuring that every penny is spent effectively. Through the implementation of these measures, effective financial support needed for the construction of county-level close-knit medical communities can be ensured.

3.2. Optimize Talent Incentive Mechanisms to Enhance Medical Service Capacity

It's crucial to recognize that medical personnel are the core competitiveness of close-knit county-level medical communities. Therefore, building an effective incentive mechanism aimed at safeguarding the enthusiasm and development of medical personnel is crucial for improving the capacity of grassroots medical services.

Priority should be given to talent "attraction" and "cultivation." "Attraction" involves implementing talent policies such as settlement subsidies and special allowances for healthcare system professionals. Quantify grassroots training indicators, periodically dispatch grassroots medical personnel to participate in standardized training for general practitioners, job rotation training, and technical training, and provide targeted free education for village health workers. Leading hospitals should conduct academic lectures, skills demonstrations, and business training to further improve the capabilities of grassroots doctors.

Moreover, it is recommended to establish a "medical community talent sharing pool" to accurately deploy personnel within the medical community, focusing on dispatching intermediate and senior title technical personnel or doctors with high public recognition and reputation for periodic grassroots work immersion. Implementing designated responsibilities, goals, assessments, and treatment measures, ensuring the effectiveness of the "town recruitment village use" policy.

3.3. Accelerate Information Platform Construction to Improve Service Efficiency

In order to improve the efficiency of grassroots medical services, it is necessary to focus on accelerating the construction of information platforms. The advancement of information and communication technology provides innovative solutions for the medical and health fields. Applications such as electronic health records, telemedicine, and intelligent diagnosis can effectively promote the optimization of resource allocation and the efficient management of service processes.

Led by the Health Commission, integrate existing HIS or CIS or EMR and PACS, LIS, and public health information systems into a shared system. This system should realize functions such as regional testing, remote prescription review, referral appointments, and family doctor signing services, establish electronic medical records, intelligent services, and cloud-based diagnosis and treatment sharing information architecture within the medical community, and strengthen the tracking of shared information, timely reminders, and assessments for unattended push information.

3.4. Promote Innovative Management Systems and Operating Mechanisms

In the process of exploring the construction of close-knit county-level medical communities, the innovation of management systems and operating mechanisms is crucial for improving service efficiency and realizing optimal resource allocation. Firstly, gradually promote the reform of the “management system.” It is recommended to establish a leading group for medical communities led by the district committee and government, and a supervisory board for medical communities jointly formed by multiple departments including the district health commission. These bodies should actively promote and implement regulations, personnel, finance, and assessment systems for close-knit medical communities. For example, in terms of regulations, a list of responsibilities for medical community positions should be established, clarifying that the director of the medical community should be selected by various stakeholders. Personnel-wise, the allocation of medical institutions at the district and township levels should be determined by relevant departments and used collectively by the medical community.

Secondly, implement the “town recruitment village use” reform. It is suggested to pilot this reform in 10 village clinics with good basic conditions close to the city, transforming them into village-level medical service points extending from township hospitals. Existing rural doctors in pilot areas should be subject to a classification reform. Specific implementations, such as retirement subsidies for doctors over 70 years old, and encouraging doctors between 60 and 70 years old to retire with subsidies or part-time work options.

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Adaptability and Comparative Analysis of Social Work Ethics in Cross-Cultural Integration: A Focus on Localization

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Abstract: This paper commences with an overview of global social work ethics' fundamental principles and the prevalent international framework, followed by tracing the evolution of China's social work ethics and its indigenous characteristics. Through meticulous examination of core ethical elements in international social work and in-depth scrutiny of the integration between traditional Chinese ethics and social work ethics, the study illuminates similarities and differences between Eastern and Western ethical paradigms in social work. Leveraging comparative analysis of exemplar cross-cultural social work cases, the research explores how social work ethics can adapt to local contexts during cross-cultural integration, proposing strategies to address challenges and chart future directions. The findings significantly contribute to refining China's social work ethical system and enhancing service quality within the global context.

Keywords: Social work ethics; Cross-cultural integration; Localization; Traditional Chinese ethics

1. Introduction

In the era of globalization, social work, as a profession deeply rooted in ethical principles, encounters novel challenges when navigating diverse cultural landscapes. The cross-cultural exchange of practices, theories, and values necessitates a nuanced understanding of how social work ethics adapt and evolve within different contexts. This study's relevance lies in addressing the lacuna in knowledge regarding the localization of global ethical standards in social work, particularly in the context of integrating traditional Chinese ethics with contemporary practice.

The primary objective is to explore the adaptability of international social work ethics within China's unique cultural fabric and analyze the congruities and divergences with Western ethical frameworks. Additionally, this research aims to identify strategies that facilitate effective ethical integration in cross-cultural settings and propose avenues for future development.

This article is divided into the following parts, this paper commences with a review of global social work ethics and their application in the Chinese context. It then delves into an analysis of core ethical elements, followed by an exploration of the fusion between traditional Chinese ethics and social work practices. Subsequently, through case studies, it examines the localization strategies in cross-cultural social work. Lastly, the paper outlines the implications of these findings for both theory and practice, underlining the importance of culturally sensitive ethical frameworks in global social work. This study contributes to the advancement of a more nuanced and culturally adaptive ethical paradigm in social work, thereby enriching global practice and scholarly discourse.

2. Literature Review

2.1. Global Perspectives on Social Work Ethics

International social work ethics are underpinned by principles such as respect for human rights, client autonomy, confidentiality, and social justice. These are codified in frameworks like the International Federation of Social Workers' (IFSW) Global Ethical Standards, which serve as a common ground for practitioners worldwide. However, these global standards must be interpreted and applied within the unique cultural nuances of each country.

2.2. Evolution of Chinese Social Work Ethics

Chinese social work ethics have evolved since the late 20th century, reflecting both international influences and indigenous cultural values. Initially modeled on Western frameworks, the profession has gradually integrated traditional Chinese ethical principles, such as be-

nevolence (仁), reciprocity (礼尚往来), and harmony (和). This evolution highlights a distinct ethical identity that aligns with China's socio-cultural context.

2.3. Comparison of Western and Eastern Ethical Systems

Comparative analysis reveals that while Western social work ethics often emphasize individual autonomy and rights, Eastern systems, including China's, lean towards communal harmony and filial piety. The emphasis on relationality and collectivism in Eastern ethics can lead to different ethical decision-making processes and outcomes in social work practice.

2.4. Role of Traditional Chinese Ethics

In contemporary practice, traditional Chinese ethics play a pivotal role in guiding social workers. For instance, Confucian thought encourages empathy and respect for hierarchy, influencing client-worker relationships and service delivery. Moreover, the concept of harmony encourages resolution strategies that prioritize maintaining social cohesion over individual interests, reflecting a unique ethical approach to problem-solving.

2.5. Gaps in Literature

Despite growing recognition of the need for culturally sensitive ethical practices, literature examining the localization of global ethics within Chinese social work remains limited. Specifically, there is a dearth of research exploring the practical adaptation of Western ethical principles to fit the Chinese context, the synthesis of traditional ethics with modern practice, and the challenges faced in this process. Furthermore, empirical studies detailing successful cross-cultural ethical adaptations and their implications for global social work practice are scarce. This study seeks to address these gaps by offering a comprehensive analysis of ethical adaptability and localization strategies in a cross-cultural context.

3. Core Ethical Elements in International Social Work

3.1. Universal Ethical Principles

At the heart of international social work are principles that transcend borders, including respect for human dignity, confidentiality, and non-discrimination. Respect for human dignity involves recognizing clients' inherent worth, autonomy, and right to self-determination. Confidentiality ensures that clients' information is safeguarded, fostering trust. Non-discrimination underscores equal treatment regardless of clients' backgrounds, promoting social justice.

3.2. Contextualization in Cultural Settings

While these principles are globally recognized, their application varies across cultures. In some societies, respect for dignity may involve honoring collective identities and community involvement in decision-making. Confidentiality can conflict with communal values where sharing information is considered supportive. Non-discrimination principles may need to account for cultural norms that differ from Western liberal ideals, without compromising on human rights standards.

3.3. Challenges in Cross-Cultural Maintenance

Maintaining ethical standards across cultures poses several challenges. Language barriers can impede communication and understanding of consent. Differences in power structures and social hierarchies may affect client-worker relationships and autonomy. Moreover, varying interpretations of privacy and confidentiality can lead to misunderstandings. Cultural relativism versus universal human rights poses a philosophical dilemma, necessitating a nuanced approach that balances respect for cultural traditions with universal ethical imperatives. Addressing these challenges requires cultural humility, ongoing education, and adaptable ethical frameworks that honor both global standards and local realities.

4. Integration of Traditional Chinese Ethics with Social Work Practice

The integration of traditional Chinese ethics, deeply rooted in Confucianism, Taoism, and Buddhism, enriches contemporary social work practice. Confucianism's emphasis on ren (仁, benevolence) fosters empathy and compassion towards clients, shaping intervention strategies that prioritize mutual respect and understanding. The Taoist principle of wuwei (无为, non-action) encourages social workers to facilitate change indirectly, respecting clients' autonomy and natural progression towards self-improvement. Buddhist teachings of compassion and mindfulness guide practitioners in cultivating a non-judgmental attitude, essential in working with diverse populations.

5. Cross-Cultural Fusion and Localization Strategies

Effective localization strategies hinge on understanding and respecting cultural nuances while adapting global ethical principles. One strategy involves dialogues and workshops that facilitate cross-cultural learning, where social workers from different backgrounds share ethical dilemmas and solutions, fostering a shared understanding. Adaptation also means translating global ethical codes into locally relevant guidelines, such as incorporating guanxi (关系, interpersonal relationships) into confidentiality considerations, acknowledging the importance of family and community involvement in decision-making.

Case studies from rural and urban China highlight successful adaptations. In rural areas, social workers have blended traditional respect for elders with Western notions of client empowerment, creating programs that involve elderly community members in decision-making processes related to their care. Urban initiatives often incorporate digital platforms to maintain confidentiality while engaging with clients in a manner that aligns with modern lifestyles, yet remains respectful of privacy expectations within the Chinese context.

Localization further necessitates continuous evaluation and modification of practices, ensuring ethical frameworks remain relevant amidst societal changes. It also involves capacity building among social workers to develop cultural competence, including language skills, awareness of cultural taboos, and an understanding of how to navigate hierarchical structures that influence client interactions.

Through these strategies, social work in China is progressively integrating global ethics with its rich ethical heritage, demonstrating that cross-cultural fusion can strengthen ethical practice, enhancing service quality and cultural sensitivity.

6. Implications and Future Directions

This study's findings contribute to the development of a localized ethical framework that merges global principles with Chinese cultural values, offering a roadmap for other countries seeking to contextualize social work ethics. Theoretical implications suggest a need to refine ethical theories to accommodate cultural diversity, promoting a global ethics discourse that is inclusive and adaptive. Practically, the insights encourage international collaborations and cross-cultural training for social workers, enhancing global practice's responsiveness to local needs.

Acknowledging limitations, including the focus on Chinese context and the need for broader cultural comparisons, future research should explore diverse cultural adaptations worldwide, assess the effectiveness of localization strategies, and delve deeper into ethical dilemmas unique to cross-cultural practice. Longitudinal studies can track the evolution of localized ethical frameworks over time.

7. Conclusion

Recapitulating, this investigation has underscored the adaptability of social work ethics across cultures, particularly examining the integration of traditional Chinese ethics with international standards. By comparing ethical systems and analyzing localization strategies, it has emphasized the centrality of cultural sensitivity in global social work. The synthesis of global ethics with local traditions is crucial for ethical practice that respects and responds to cultural particularities.

The call to action is clear: continuous dialogue and collaboration among international social work communities are imperative for fostering a global ethic that is not only universally applicable but also locally responsive. As social work continues to globalize, the commitment to ethical localization and cultural humility will be pivotal in advancing ethical practice and promoting social justice worldwide.

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The feasibility of converting invasive plants into biochar for carbon sequestration and the level of public knowledge about this

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Abstract: In the context of the current national “dual carbon” strategic goal, the team members proposed to use “invasive plants into biochar” to deal with invasive plants and as a way to save energy and reduce emissions, so as to improve environmental problems, achieve soil improvement, greenhouse gas emission reduction and remediation of polluted environment. The online social questionnaire survey was widely carried out nationwide, and the Cronbach’s α value of the collected questionnaire survey results was 0.792 through reliability analysis, indicating that the reliability of the questionnaire was acceptable, and it was concluded that the public’s cognition of invasive plants and biochar was low. Therefore, the team members put forward the prospect of “one heart, more promotion”, and adopted different measures for different types of people to promote the implementation of the topic of “invasive plants to achieve carbon sequestration”.

Keywords: invasive plants; Biochar; Carbon sequestration and emission reduction; Investigation and research; solution

1. Invasive plants

1.1. Definition of invasive plants

Invasive plants are non-native plants that establish rapidly growing populations in the wild. Once established, they displace native vegetation and change Ecosystem, and dominate. It has the characteristics of strong ecological adaptability, strong reproductive ability and strong communication ability.

1.2. Harm of invasive plants

In the long-term evolution process of nature, different organisms restrict and coordinate with each other, forming a stable ecological balance system. After plants invade new habitats, they break away from the mutual constraints between species in the original habitats, and are easy to spread and spread, forming a large area of unioptimal communities, destroying the local flora and fauna, endangering the survival of local endangered flora and fauna, bringing disastrous consequences to the ecosystem, and producing A chain reaction of health and harm to human health and society.

1.3. Traditional treatment of invasive plants

The traditional treatment methods of invasive plants mainly include physical methods (including manual extraction, mechanical use), chemical methods, biological control.

2. Biochar

2.1. Definition of biochar

Biochar is a substance such as crop straw, wood, and rice husks that is thermalized under high temperature conditions (usually $< 700^{\circ}\text{C}$)

The product produced by burning and transforming can be used as soil conditioner.

Biochar has a high aromatic structure (low energy system, relatively stable), which determines that it has higher chemical and biological stability than other sources of carbon, has a stronger ability to resist microbial decomposition, and can be preserved in the environment and ancient sediments for a long time and is not easy to be mineralized, so it is considered to be a stable CO_2 reservoir.

2.2. Transformation mechanism of biochar

Through the pyrolysis carbonization of biomass, organic matter is carbonized to form biochar. The first is the reaction environment of biomass at higher temperatures. The volatile components are removed from the bottom, cracking occurs, forming coke, and then react to form biochar under certain temperature and pressure environment.

At present, the preparation technology of biochar is mainly divided into high temperature thermal cracking technology, hydrothermal carbonization technology, gasification technology and microwave pyrolysis technology 4 methods.

2.3. Advantages of conversion of invasive plants into biochar

The invasion of alien plants has become a global ecological environment problem, which poses a serious threat to the local biodiversity, the structure and function of the ecosystem, the social economy and human health, and is one of the most intractable environmental problems faced by mankind. The conversion of invasive plants into biochar has the following advantages:

2.3.1. From the invasive plants themselves, under normal circumstances, compared with other raw material sources of biochar, plant biochar raw materials are more widely distributed and easier to obtain, and the biochar prepared is of higher quality. From the perspective of biochar composition, plant biochar has the highest carbon content and the least ash content, and the pyrolysis process is the most environmentally friendly. Invasive plants are widely distributed in our country and are in urgent need of manual treatment, easy to find and obtain, because it is a good source of raw materials for preparing biochar.

2.3.2. Compared with traditional methods for the treatment of invasive plants, traditional methods for the treatment of invasive plants include physical methods, chemical methods and biological control. A large number of studies have shown that these traditional treatment methods have certain shortcomings, can not eradicate invasive plants and can not produce other benefits. The treatment method of converting invasive plants into biochar advocated by this team can not only eliminate invasive plants, but more importantly

It can give full play to the advantages of biochar itself and produce great benefits of improving soil, reducing greenhouse gases and repairing environmental pollution.

2.4. Comprehensive benefits of biochar

2.4.1. Effect of biochar on soil improvement

(1) Biochar can enrich a large number of nutrients such as N, P, K and Ca, increase soil fertility and improve crop yield.

(2) Biochar has a large specific surface area, high porosity and rich surface functional groups, and can be used as an adsorbent to remove soil Heavy metal ions and organic pollutants in soil.

2.4.2. Effect of biochar sink enhancement and emission reduction

(1) The rich functional groups on the surface of biochar have a certain adsorption capacity, which makes biochar have a certain carbon fixation capacity, and this

The ability to sequester carbon more significantly than ordinary soil.

(2) Biochar achieves carbon sequestration and emission reduction by reducing the burning of carbonaceous bodies such as plants and inhibiting the activity of methanogenic bacteria.

2.4.3. Environmental remediation ability of biochar

A large number of studies have shown that the adsorption capacity of biochar to organic pollutants is much stronger than that of other forms of natural organic matter per unit of organic carbon massQuality , which can efficiently adsorb and fix a variety of toxic organic pollutants.

3. Analysis of social research results

3.1. Educational level and professional direction will limit the popularization of invasive plants, so the universality of subsequent popularization should be considered

By cross-analyzing the number of samples with “education level” and “understanding level”, the team found that the reason for the low understanding of invasive plants in middle and high school students may be the limited knowledge level and relatively blocked information. The educational level of the college students and above has reached a certain level, but the team still found that the samples still have a low understanding of the situation, so the “professional direction” question was added to analyze the reasons for the restriction. It can be seen from the survey data that the undergraduate group of science and engineering majors or above had the highest understanding of invasive plants, while the other samples had a lower understanding than those of science and engineering majors because their majors rarely involved relevant knowledge. All in all, when the educational level rises to a certain height, the professional direction will also affect the popularization of invasive plant knowledge, so the subsequent popularization of invasive plants should be considered universal. Sex, using different strategies for different groups.

3.2. Make use of the advantages of TV, radio, Internet and other popular science channels and deal with the obstacles to achieve multi-channel, all-round and wide coverage

First of all, through the cross analysis of the “very familiar”, “relatively familiar”, “heard of, but do not understand” groups and “from what way to understand invasive plants”, the team can find that in these groups with basic understanding of invasive plants, the vast majority of the knowledge of invasive plants through TV, radio and Internet information. In addition, the proportion of people who get to know through newspapers and magazines, work units and school education is also large. Therefore, if the flow of online science popularization is limited, it is of great development space and significance to take newspapers, magazines and school education as the way of science popularization.

Secondly, the “totally unknown” population was cross-analyzed with “unknown causes of invasive plants”. The analysis shows that the school

Insufficient popularization of education, inadequate government publicity, and low personal interest are all factors that cannot be ignored to hinder the implementation of science popularization.

Therefore, in the follow-up popularization of science for different age groups and school age groups, it is necessary to vary from person to person and combine the population with the advantage approach; At the same time, it pays attention to and analyzes the hindrance factors, puts forward relevant strategies to reduce the hindrance, and finally turns the hindrance into a thrust to achieve a comprehensive and wide coverage of science popularization.

3.3. After weighing the advantages and disadvantages, this model has been recognized and supported by most of the surveyed people

The proportion of people who agreed with the model of “transforming invasive plants into biochar to achieve fertilizer and carbon sequestration” proposed by this team was as high as 93.08%, and only 6.92% disagreed, indicating that most of the public agreed with this model after weighing the advantages and disadvantages. The proportion of people willing to join the action is 76.49%, indicating that the promotion of this model has a mass foundation and its real implementation is feasible, which is conducive to the subsequent adoption of corresponding measures for the promotion and popularization of the team. In addition, 91.06% of people were willing to help the relevant departments in the supervision of invasive plants and facilitate the subsequent biochar production process, indicating that the public has a high enthusiasm in participating in supervision and has great potential to play the role of the public. After understanding the relevant knowledge, 93.33% are willing to take the initiative to spread the relevant knowledge to the people around them, which expands the way and efficiency of the team’s science popularization, and enables certain people to participate in our actions

4. Solution

Focusing on the core concept of “transforming invasive plants into biochar to achieve carbon sequestration and emission reduction”, science popularization education has been widely carried out in the whole society, aiming at raising the public’s awareness of the harm of invasive plants and protecting ecological security, and striving to promote “transforming invasive plants into biochar”. This technology grad-

ually replaces traditional invasive plant treatment methods to solve the problem of incomplete invasive plant treatment and achieve emission reduction targets.

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A study on the translation of Peking Opera terminology from the perspective of communicative translation theory

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Abstract: With China becoming more and more international, Chinese traditional culture is also known by the world. Peking Opera is a treasure of Chinese traditional culture, and the development involves translation which can help the spread of Peking Opera. Based on Newmark's communicative translation theory, this article discusses the Chinese-English translation of Peking Opera terminology. When translating Peking Opera terminology, it is necessary to consider many aspects of language communication. This article analyzes the translation strategies of functional terminology and culture-loaded words in Peking Opera terminology, including literal translation, additional translation, interpretation and transliteration, providing reference for the translation of Peking Opera terminology and contribute to the international communication of Peking Opera.

Keywords: communicative translation theory; Peking Opera terminology; culture difference; translation strategies

1. Introduction

As the national treasure of China, Peking Opera has the reputation of "Flower of Oriental Art", and has great representation and influence in the field of opera. Peking Opera translation plays a crucial role in the foreign dissemination of Peking Opera, and Peking Opera terminology, as one of the components of the translation of Chinese cultural texts, is a difficult and challenging part of translation. Some terms have multiple interpretations and meanings and are also unfamiliar to Chinese people. In order to enable foreigners to better understand the connotation and essence of Peking Opera, accurate translation methods and translation strategies for Peking Opera terminology are the difficulties and challenges faced by scholars.

Translation is a complex process that involves more than just translating from one language to another. Translation of terminology requires careful consideration of multiple aspects of linguistic communication, including pragmatics, context, cultural background, linguistic function and meaning. This paper will explore the Chinese-English translation strategies of Peking Opera terms from the perspective of the communication theory proposed by Newmark, aiming to further explore the difficulties in decoding and translating Peking Opera terms and to point out effective translation techniques.

2. Theoretical foundations

2.1. Newmark's Theory of Communication

Newmark's theory of communication holds that linguistic communication is a kind of social behavior, which not only includes the transmission of information, but also involves a variety of elements such as communication, interaction, understanding and creation of meaning. He believes that language is not only a symbolic expression of meaning, but also a tool for social communication. So translation needs to take these factors into account in order to accurately understand the meaning and expression of the original text (Peter Newmark, 2006). In communicative translation, the translator should try to make the effect of the target text as close as possible to that of the source text. As more attention is paid to the effect rather than the content, it is important to make sure that the source language source text is in line with the target language and culture and is easy to be understood by the readers. (Yang Li, 2008).

2.2. Terminology

Terminology is the study of terminology in specialized fields, which involves many facets of language, profession and culture. The initial study of terminology focuses on terms and their characteristics, terminology and its objects of study. "General terminology studies the

formation and use of specialized words while revealing the common characteristics of all specialized terms. The conceptual system of terminology is completely based on the principles and methods of knowledge ontology and in-depth understanding of the concept of terminology. Therefore, the translation of terminology needs to pay attention to various factors such as professional context, cultural background, language habits and the needs of the target readers of the translation.

Terminology plays a great role in the establishment and improvement of the terminology system of disciplines. With the development of science and technology and the cross-fertilization of disciplines, terminology is also constantly updated and developed. Translators should constantly enrich their knowledge and master the progress of knowledge and new concepts in related fields. Apply the theory of terminology in practice, consider the context in translation, ensure the accuracy and consistency of translation, and conform to terminology normalization and standardization.

3. Linguistic Characteristics of Peking Opera Terminology

Peking Opera terminology, on the other hand, is a form of linguistic symbols characterizing concepts specific to the field of Peking Opera (Yin Jian and Yu Wenqing, 2019). It is a unique linguistic symbol and special discourse system in Peking Opera with many unique features, and is undoubtedly an important part of the group layer of Chinese Peking Opera. The naming of Peking Opera terms is closely related to the performance forms and characteristics of Peking Opera. There are many categories of Peking Opera terminology, each of which has a deep meaning and form of expression. These words can reflect the regional characteristics and cultural background of Peking Opera, and enhance the power of expression.

Peking Opera is one of the traditional Chinese opera genres with rich cultural background and historical accumulation. Therefore, the translation of Peking Opera terminology also needs to take into account the influence of cultural background. As a traditional Chinese cultural art, Peking Opera has Chinese cultural characteristics in its performance style, plot content and character features. Therefore, Peking Opera terminology represents its own cultural characteristics, and when translated, it needs to indicate its cultural background and connotation so that foreign readers can better understand its meaning and importance.

4. Translation Strategies for Peking Opera Terminology

“Terminology translation is different from general text-based translation, in which the limitation of symbolic space for linguistic form transformation and the cultural divide for conceptual meaning regeneration often coexist (Wei Xiangqing, 2018).” Peking Opera has a unique form of performance, and Peking Opera performance is an art discipline that integrates literature, music and performance, so translators should also take this unique artistic style and characteristics into full consideration when translating. In the process of foreign dissemination, opera terminology often faces the problems of its own difficulty, inconsistent interpretation, biased translation and lack of talents. Therefore, it is important to improve the cultural literacy and terminological awareness of translators, adhere to correct translation principles in foreign communication, and summarize specific translation strategies and methods for the inheritance and dissemination of Peking Opera culture.

4.1. Translation of Performance Function Words in Peking Opera Terminology

Performance function words refer to the words used to describe the forms and characteristics of performances in Peking Opera. The most basic performance function words include “念白”、“唱腔”, which describe the language, music and other elements of Peking Opera performances. They describe the sound effects, movements, make-up and stage elements of Peking Opera performances.

These performance function terms carry the performance characteristics and styles of the Peking Opera art form, and also reflect the historical and cultural background of Peking Opera performances.

4.1.1 Translation of terminology for performance role categories

(1) “小生”: In Peking Opera, “小生” usually plays the role of young, handsome, loyal, brave, etc. When describing in English, directly translating “小生” as “young male” can convey his age and gender, while adding “role” indicates that it is a dramatic role. When describing the character in English, “young male” can convey his age and gender.

(2) “花旦”: It is a young female role in Peking Opera, which is often graceful, elegant and refined. Translating it as “young female

role” directly conveys the gender and age of the character, while emphasizing its role attributes in the drama.

The above two terms are precisely the use of “augmentation translation” in “meaning translation”, which translates the implied meanings additionally, with the intention of giving full play to the communicative function of language and conveying the meanings and connotations of the words themselves. From the perspective of communicative translation, it is conducive to the understanding of English readers.

4.1.2 Translation of phonetic terminology

(1) “唱腔 ”: Singing style in Peking Opera is an important means of expressing emotions and characterization of the characters, and it usually uses specific musical rhythms and tones. Translated as “vocal style”, it can convey the characteristics of its musical expression and fully achieve the communicative effect.

2) “五音调式 ”: Its musical expression has a unique status in Chinese culture. Using the strategy of communicative translation, translating it as “five-tone scale” can convey its musical nature

In a word, the translation of Peking Opera terminology needs to be carried out according to its specific context and characteristics, so as to convey its meaning and characteristics as accurately as possible. Translation usually needs to use some expressions and terms to convey the meaning in the original text, but it should also be careful not to lose the cultural connotations and special features in the original text.

5. Conclusion

Newmark’s communicative translation theory provides a new theoretical perspective for interpreting the current translation status of Peking Opera terminology. Translating Peking Opera terminology involves many aspects such as language, culture and art, etc. Taking Wang Rongpei’s and Xu Yuanchong’s translations as an example, this paper elaborates on the importance of translating Peking Opera terminology not only in consideration of its unique performance form and cultural background, but also in preserving the linguistic features and characteristics of the original text, and discusses its translation strategies. When translating Peking Opera terminology, different translation strategies, such as direct translation, annotation, and augmentation, are utilized in order to better convey its meanings and characteristics. At the same time, it is necessary to constantly strengthen the research and understanding of Peking Opera terminology and culture in order to better promote and pass on traditional Chinese culture and art.

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A Brief Introduction to Feminist Theories

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Abstract: Feminist movements were born among new bourgeoisie women, and were closely related to French Industrial Revolution and American Abolition Movement. From the mid-19th century to the present, feminism has experienced three waves. However, regardless of theoretical faction, feminists and feminist critics all recognize the historical fact that women are suppressed and discriminated against by men. Based on ‘patriarchy’ and ‘gender’, they discuss sexual issues to rewrite the history of literature and literary criticism, and rediscover female writers and works buried under the male society and patriarchal culture to construct ‘female discourse’ to support ‘female writing’.

Keywords: feminist theories; feminist criticism; patriarchy; gender

Introduction

The term feminism, first appeared in France in 1870, was used to describe male adolescents who developed lung disease and exhibited female characteristics. But it soon became a synonym of women’s liberation, referred to women’s claims for their equal social rights with men. In 1880s, feminism first appeared in England. American began to use it in 1920s, but only professional women who served in government or taught in universities would use the term. In 1980s, feminism began to pay more attention to the equality of culture and spirit between men and women, try to break down sexual hegemony ---- ‘patriarchy’ and explore deeply into the causes of ‘gender’ inequality. Feminist criticism is the product of extensive feminist movements, criticizes ‘gender’ discrimination from the point of literature. Based on the core concept of feminist theories, ‘patriarchy’ and ‘gender’, feminist critics criticize patriarchal culture and classics from different point of view. “From the mid-19th century to the present, feminism has experienced three waves, which seemed to confirm Fisher’s assertion ---- modern women, like glaciers, are slowly cutting out a new economic and social landscape to build a new world.”^[1]

The Core Concept of Feminist Theories

The emergence of feminist criticism is the result of extensive development of feminist movements. It is the product of feminist movements that penetrate deeply into cultural field. Western feminist theoretical trend was diversified at the beginning, so feminist criticism has always been characterized by diversity. However, regardless of theoretical faction, feminists and feminist critics all recognize the historical fact that women are suppressed and discriminated against by men. They acknowledge that all knowledge created by patriarchal society is served to suppress women and ‘gender’ is the root of women’s oppression.

‘Patriarchy’

‘Patriarchy’ is a proper noun in early anthropology, refers to clan organization and cultural structure centered on ‘patriarchy’ in human society. It symbolizes male domination which maintains that all authoritative positions in politics, economics, law, religion, education, military must be reserved for men. As an invisible hand, ‘patriarchy’ makes men dominant in society while women disadvantage and subordinate. Under the background of patriarchal society, the paradigm, obviously as a result of elaborate rather than natural fabrication, which indicates that men are superior than women influences everyone from patriarchal family. Feminist theories extends ‘patriarchy’ to the whole history from patriarchal clan commune to today’s society to reveals that ‘patriarchy’ is the social precondition of women’s oppression.

‘Gender’

‘Gender’ is the core concept of western feminist theories in the second wave. The proposition of ‘gender’ has a profound influence on western feminist theories. Almost every feminist critics have responded to ‘gender’ and made their own evaluation on it. The first to propose ‘gender’ is Simone de Beauvoir, who explicitly rejects the conventional perspective that sex and ‘gender’ are an organic unity. “Sex is caused by biological factor ---- chromosome in human body while ‘Gender’ is constructed by mentality, culture and social means.”^[2] The social shaping process of human ‘gender’ role, which starts from infancy in a subtle way, is quite different from other education and socialization

processes of human beings. Parents will buy cap gun for boys, but dolls for girls, and choose to control the behavior of boys and girls consciously and unconsciously. For example, boys will be scolded when they are crying while girls will be comforted. The social shaping process of human 'gender' role will cause the formation of 'masculinity' and 'femininity', which are explained by 'patriarchy' as natural things and become an excuse for men to deprive women's rights.

Feminist Criticism

Feminist criticism is the product of feminist movements and is a kind of literary criticism focused on women themselves and their writing. "It has two starting points, one is to reexamine the whole literature history from the perspective of women, the second is to establish a independent kingdom of women's literature or a literature that fully displays female world."^[3]

First-wave Feminist Criticism

First-wave feminist criticism developed extensively throughout the nineteenth and early twentieth centuries. The Women's Rights and Women's Suffrage movements were the crucial determinants in shaping this phase, with their emphasis on social, political and economic reform. Virginia Woolf and Simone de Beauvoir are the representatives of this phase.

"Virginia Woolf is the founding mother of contemporary feminism, who announces many issues later feminist critics were to focus on and who herself becomes the terrain over which some debates have struggled."^[4] As a pioneer of feminism, Woolf's contribution to feminist criticism is well known. Her famous work *A Room of One's Own* focuses on the history and social context of women's literary production. "She thinks that what makes women's writing differ from men's writing is not women's mentality but their social status."^[5] She believes that when women get the same social status with men they also can create great works. So she puts forward that a room of one's own which is both material and spiritual and 500 pounds a year are the basic conditions for women to create. She realizes that women's identity is constructed by social means, rejects a 'feminist' consciousness and wants her femininity to be unconscious so that she might escape from the confrontation with femaleness or maleness. "She appropriates the Bloomsbury sexual ethic of 'androgyny' and hopes to achieve a balance between a 'male' self-realization and 'female' self-realization."^[6]

Simone de Beauvoir marks the moment when 'first-wave' feminism begins to slip into the 'second-wave'. She thinks that 'gender' identity is not innate but constructed by society and culture. "Making the crucial distinction between 'being female' and being constructed as 'a woman', de Beauvoir can posit the destruction of patriarchy if women will only break out of their objectification."^[7] Her representative work *The Second Sex* is considered as the most robust and sensible book to discuss women, an incisive summary for contemporary feminist movements and theories and the Bible for western feminist movements. In *The Second Sex*, she uses a novel and unique perspective to analyze the history of women and finds that women are shaped by social culture and patriarchy as 'the second sex' weaker than men. "Men limit women to families, making them less capable than men and giving them unique 'femininity'.^[8] "This 'femininity' is constructed under the influence and oppression of 'patriarchy' which is rooted in the 'binary opposition system' between men and women."^[9] "The *Second Sex* is clearly pre-occupied with the 'materialism' of the first wave, it beckons to the second wave in its recognition of the vast difference between the interests of the two sexes and in its assault on men's biological and psychological, as well as economic, discrimination against women."^[10]

Second-wave Feminist Criticism

The first-wave feminist criticism ended with the victorious passage of bills such as women's property rights and voting rights, but women still didn't acquire true independence and freedom. Betty Friedan's *The Feminine Mystique* in 1963 revealed 'feminine mysticism' with patriarchal social ideology which stipulated and propagated 'femininity' to bring women back home again. From men's perspective, families are the best place for women to realize their value, education and works are the obstacles for women to realize their value and 'femininity'. The publication of *The Feminine Mystique* resonated with women and marked the beginning of the second-wave feminist criticism.

The first important feminist critic is Kate Millett in the second phase. Her argument in her representative work *Sexual Politics* is that ideological introduction as much as economic inequality is the cause of women's oppression, which opened up second-wave thinking about reproduction sexuality and representation. *Sexual Politics*, as a formative text in feminist criticism, is a pioneering analysis of masculinist historical, social and literary images of women, and proves that how literature and political philosophy carefully conspire against sexual equality. "She stresses the importance of rereading text and rediscovering 'gender' identity to represent female image, which breaks down the

authoritative and credible female image drawn by traditional male writers in literature.”^[11]

Elaine Showalter is another important American feminist critic in the second-wave feminist criticism, who is the pioneer of theory ‘gynocritics’, and one of the most influential American critics of contemporary western feminist criticism. Her representative work *A Literature of Their Own* examines British female novelists since Bronte to Lessing through women’s experience. She criticizes the sexual discrimination actions in which patriarchal culture marginalizes female literature, and condemns the double critique standards upon female literature. Her attention is not only focused on great female novelists but also those who are ignored. She tries to understand how women begin to write in the face of repression and find out the reasons why female literary traditions can survive and continue. She divides this tradition into three phases. “The first, ‘feminine’ phase (1840-80) includes Elizabeth Gaskell and George Eliot, and is one where women writers imitated and internalized the dominant male aesthetic standards which required that female authors remain gentlewomen; the ‘feminist’ phase (1880-1920) includes such radical feminist writers as Elizabeth Robins and Olive Schreiner, who protest against male values and advocate separation utopias and suffragette sisterhoods; the third, ‘female’ phase (1920 onwards) inherited characteristics of the former periods and developed the idea of specifically female writing and female experience in a phase of self-discovery.”^[12]

In addition to American feminist critics, French feminist critics also played crucial roles in the second-wave feminist criticism, especially in theoretical contribution. After 1970s, French feminist critics began to pay more attention to the thinking of philosophy and literary text to relate the history and current situation of women to contemporary philosophy. French feminism has been deeply influenced by psychoanalysis, especially by Lacan’s reworking of Freud. “On the basis of the recognition of ‘gender’ difference, French feminists called on women to devote themselves into social practice and strive for real equality.”^[13]

Helen Cixous proposes to use bodies to express female’s existence, needs and desires, and show their own characteristics in new way through physical differences. Her essay *The Laugh of Medusa* is a celebrated manifesto of ‘women’s writing’ which calls for women to put their ‘bodies’ into their writing to deconstruct patriarchal culture and subvert ‘phallogocentrism’. Cixous had been working to reject ‘masculine/feminine binary opposition’ to establish women as the source of life and call for emergence of new female discourse which was oppressed by patriarchal binary system.

Luce Irigaray’s *Speculum de l’autre femme* develops, in more rigorously philosophical terms, ideas which resemble Cixous’s. “She considers that patriarchal oppression of women is founded on the type of negative constructions associated with Freud’s theory of female sexuality.”^[14] She realizes the difference between men and women, argues that male exploitation of female is based on sexual difference. In traditional identification of gender difference, male are the subject in the works and world so that male become the subject of ethics, morality or politics. However female are object so that they can only engage in secondary art, such as cooking, weaving, embroidery, music, etc. The formation of ‘masculinity’ and ‘femininity’ is the result of ‘phallic domination’. Only the celebration of women’s difference ---- their fluidity and multiplicity ---- can rupture conventional Western representations of them.

Under the influence of Lacan’s psychoanalysis, Julia Kristeva absorbs semiotics of Saussure, and puts forward the difference between ‘semiotics’ and ‘symbolic’. ‘Semiotic’ represents maternal idiosyncrasy while ‘symbolic’ represents masculine idiosyncrasy. “For this ‘semiotic’ material to become ‘symbolic’ it must be stabilized, and this involves repression of the flowing and rhythmic drives.”^[15] ‘Semiotic’ is the predecessor of ‘symbolic’ and lies in ‘symbolic’ to protect and subvert it. Kristeva advocates that women can’t tacitly approve their unequal status in patriarchal society, because women are unique and have their own idiosyncrasy. If women do not struggle for their own idiosyncrasy, they will give up their own existence.

Beside American and French feminist critics, English feminist critics also struggled a lot for women’s rights. Socialist/Marxist feminism was a powerful stand of the second-wave during the late 1960s and 1970s, in British in particular. “It sought to extend Marxism’s analysis of class into a women’s history of their material and economic oppression, and especially of how the family and women’s domestic labour are constructed by and reproduce the sexual division of labour.”^[16] Michele Barrett is one of representatives of Socialist/Marxist feminism. She applauds Virginia Woolf’s materialist argument, and puts forward that the ideology of gender affects the way the writings of men and women are read and how canons are established. She also insists that feminist critics must take account of the fictional nature of literary texts.

Third-wave/Third-World Feminist Criticism

In 1980s, some minority scholars and critics from the third world challenged Western theories including Eurocentrism and Western Feminism. Their critical discourse was later called post-colonial discourse because Third-wave/Third-World Feminist Criticism is intertwined with contemporary 'post-modern' theories. It stresses female internal difference, advocates focusing on women's status in the cross of gender, race, class and sexual orientation and deconstructing curing gender identity.

Barbar Smith is one of black feminist critics insists that black feminist criticism system should be established for contending against white middle-class feminist criticism in her work *Towards a Black Feminist Criticism*. Because both literary criticism dominated by men and middle-class women ignore black women writers. Another black feminist critic, Bell Hooks also see the 'double invisibility' suffered by black women in *Ain't I A Woman*: 'No other group in American has so had their identity socialized out of existence as have black women... When black people are talked about the focus tends to be on black men; and when women are talked the focus tends to be on white women'. [17]

Third-wave/Third-World Feminist Criticism explores the 'doubleness' or 'hybridity' of 'African-American' identity, and tries to recover the history of black's oppression and find their own artistic discourse. It focuses itself on 'Identity Criticism' to push the ignored and suppressed women from the edge to the center.

Conclusion

Women's oppression originates from a rib taken from Adam by God. Eve is made by Adam's rib reflects that 'pallogocentrism' is deeply rooted in people's minds. Men are considered normative in all myths, but women are the variation and aberration of this norm. "What men do to women is to 'take back', while women are passively to 'return'." [18] However these two opposite actions prove that men and women are a whole life integration when man and women are fused together. The emergence of feminist criticism has provided women with a stage to establish their female identity and show their literature and discourse. For the first time, feminist criticism has promoted women as the subject of criticism and revealed the dehumanizing situation of women in the male-centered culture. It not only brings new vigor and vitality to western literary criticism but also introduce 'gender', sex, bodies and such shadowed areas into the category of literary criticism. The most important is that it breaks down the old mode of literary criticism and gives a vast thinking space for struggling western contemporary ideological trend and literary criticism. Feminism and feminist criticism have become one of dominating discourse in philosophy, ethos and literary criticism in the 21st century.

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The development process and feasibility analysis of indigenous spiritual social work in China

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Abstracts: With the rapid development of China's economy, social citizens' demand for the development of social work has become more and more vigorous, and spiritual social work, as an important field of social work, can play an important role in guiding the psychological state and normal life of social residents. This paper summarizes the development stages of spiritual social work in China by studying the development process of local spiritual social work in China. On this basis, it summarizes the feasibility of the development of spiritual social work in Chinese local society, in order to promote the recognition of spiritual social work.

keywords: spiritual; social work

1. Introduction

Spiritual social work, as an emerging paradigm of social work, arises from the reflection on and supplementation of traditional social work. Throughout history, people's exploration and concern for inner spirituality have evolved alongside societal development.^[1] Against this backdrop, spiritual social work has emerged to fulfill people's yearning for spiritual alignment. Within this field, spirituality assumes a central role as a guiding concept informing relevant practical interventions. From the perspective that individuals are integral parts of their respective nations, each person possesses their own unique spiritual capacity while every nation also possesses its distinct spiritual ability. Therefore, it becomes imperative to cultivate and develop not only everyone's spiritual aptitude but also our own nation's distinctive spiritual prowess.

Spirituality is a much talked about direction in the contemporary field of social work, where spirituality as an expression of culture, beliefs and values from an indigenous perspective has a significant impact on development at the individual, community, organizational and national levels.^[2]

2. Sources of spiritual social work theory in China

Important theories of spiritual social work in China include Confucianism, Buddhism, Taoist philosophy and Christianity imported from ancient times. To varying degrees, these theories have had a positive impact on the development of spiritual social work, providing social workers with rich ideological resources and practical guidance, and helping to better meet the needs of individuals and society at the spiritual level. In the process of localization of spiritual social work, domestic scholars have continued to draw on local spiritual theoretical knowledge from traditional Chinese culture, the practical political context of the compatibility of religion and socialism, and Western social work attitudes towards religion, spirituality and spirituality.^[3]

Confucianism plays an important role in Chinese spiritual social work. Confucianism emphasizes the core values of benevolence, righteousness, courtesy, wisdom and trust, which are closely related to the goals of spiritual social work - to promote people's inner growth, spiritual balance and social harmony. Confucianism emphasizes care and compassion for others, advocates showing empathy and respect in social work, encourages social workers to treat their clients with benevolence and love, and advocates the use of good deeds to touch others. At the same time, Confucianism also focuses on personal cultivation and self-reflection, which in spiritual social work helps to enhance social workers' professionalism, self-awareness and spirit of service.

The influence of Buddhism on spiritual social work in China is equally profound. Buddhism emphasizes the values of compassion, self-sacrifice and liberation, which are closely linked to spiritual social work's goals of caring, helping others and alleviating suffering. Buddhism teaches people to transcend material desires and pursue inner peace and wisdom, which echoes the goals of spiritual social work in pursuing spiritual growth and individual happiness. In practice, by drawing on Buddhist ideas, social workers can pay attention to the spiritual needs of individuals, guide them to alleviate their suffering and resolve their difficulties, and spread the spirit of compassion and

kindness in social work to promote social harmony and community.

Taoist philosophy also has its unique value in Chinese spiritual social work. Taoism follows the way of nature and focuses on following nature and doing nothing, which is consistent with the concept of spiritual social work, which focuses on the inner growth of individuals and respects their uniqueness and autonomy. Taoism focuses on “Tao” and “virtue” and advocates maintaining inner peace and indifference in social work, avoiding excessive intervention and coercion, and allowing individuals to spontaneously achieve inner self-cultivation and growth through inspiration and guidance. By learning and applying Taoist thought, social workers can better understand the laws of individual growth and guide them towards inner harmony and balance.

The place of Christianity in Chinese spiritual social work cannot be ignored either. Christianity stresses the values of love, faith and forgiveness, which are compatible with spiritual social work’s goals of caring for others, promoting hope and helping individuals develop positive beliefs. Christianity encourages individuals to make a connection with God and to seek spiritual comfort and strength, which is highly relevant to psychological counselling and spiritual care in social work. In practice, social workers can respect the religious beliefs of individuals, understand the impact of their beliefs on their psychology and their behavior, and integrate their beliefs into their services to help individuals better face the challenges of life with the support of their beliefs.

In the future development, spiritual social work can further deepen the research and application of these theories, combine with China’s social and cultural background, explore a spiritual social work model that is more in line with national conditions, and make a greater contribution to personal happiness and social harmony.

3. Stages of Development of Spiritual Social Work in China

The combination of spirituality and social work complements and expands the overall scope of social work. Although social work in China has flourished as an imported product, local nourishment is one of the key elements for its continued growth. Looking back at the development of spiritual social work in China, the development of indigenous spiritual social work in China can be traced back to the end of the 20th century and the beginning of the 21st century.^[4] The growth of the field has been influenced by China’s social changes, economic development and cultural shifts, as well as the continuing need for mental health and social services^[5]. The following is a summary of the major developments in spiritual social work in China:

3.1 Traditional stage: traditional Chinese society period

Traditional Chinese culture is heavily influenced by religious beliefs and spiritual practices. Ancient religious organizations and traditional belief systems such as Taoism, Buddhism and Confucianism played an important role in society, and religious institutions such as temples and Taoist temples became places where people sought spiritual fulfilment and relief. Such as the Wei and Jin dynasties of civil relief, its relief in various forms mainly to clan relief and religious relief, with a strong mystical and religious and both material relief and spiritual relief, in the spirit of the spirit of indoctrination and appeasement of the poor and weak. Through services such as prayer, shelter, charity and relief, people’s spiritual needs are met, and religious beliefs play a role in community cohesion and social support.

3.2 Social mobilization period: early 20th century to 1980s

China went through the period before the socialist revolution and reform and opening up. During this period, religious activities were restricted and there was relatively little spiritual social work. However, social mobilization and mass organizations provided some spiritual support while meeting people’s basic needs. For example, organizations such as cooperatives in rural areas and workers’ clubs in factories met people’s spiritual needs through group activities and cultural performances. This form of spiritual social work emphasizes the values of collectivism and social solidarity.

3.3 Start-up stage: early 1990s

With the progress of reform and opening, there has been a certain revival of religious beliefs and spiritual practices in China. At this stage, some NGOs and social work institutions began to pay attention to spiritual needs and provide related services. Psychological counsel-

ling agencies, community service centers and other agencies began to provide psychological counselling, spiritual support and rehabilitation services. Using professional methods and skills, these organizations help people deal with psychological distress, find inner peace and seek spiritual growth.

3.4 Specialization phase: early 2000s to today

From the beginning of the 21st century to the present, spiritual social work in China has entered a stage of professionalization. The development of professionalism of spiritual social work is mainly reflected in two aspects: first, the training and development of practitioners, and second, the theoretical construction and research of spiritual social work. Spiritual social work at this stage emphasizes professionalism and science, and focuses on research and study of spiritual issues.

4. Spiritual Social Work Feasibility Analysis in China

4.1 Cultural context and value fit

Confucianism, Buddhism, Taoism and other philosophical and religious ideas have a long and deep cultural heritage in China. The spiritual elements in these traditional cultures have much in common with the concepts of spiritual social work, such as the emphasis on inner cultivation and harmonious coexistence between human beings and nature. Therefore, spiritual social work has a high degree of compatibility in the Chinese social and cultural context and is more easily accepted and understood by the public.

4.2 Growing needs of society

The pace of life is accelerating, pressures are increasing and mental health problems are becoming more prevalent with the rapid development of modern society. Spiritual social work focuses on the inner growth and self-healing of individuals, which can help people reduce stress, adjust their mindset and improve their quality of life.

4.3 Specialised Education and Talent Pool

In recent years, the field of social work in China has seen rapid growth, with more and more colleges and universities offering social work majors, providing strong support for the professional talent pool of spiritual social work. At the same time, some professional institutions and groups are also actively promoting the concepts and methods of spiritual social work, and enhancing related education and training, providing a strong guarantee of talents for the application of spiritual social work in China.

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Exploring the Negative Effect of Tooth Extraction on Cardiovascular Disease for the Elder

Qiannan Li

Abstract: Tooth extraction of the elderly with cardiovascular disease, has drawn increasing attention of the public. In order to explore the negative effect of the extraction and reduce the potential risks helpfully, an observation was conducted in the hospital, among the elderly patients with various cardiovascular disease on their reaction towards medical monitoring in the course of the tooth extraction. The study reveals that the potential risk is relative high and the most influential risk is arrhythmia. It may be caused by the weak myocardial function and unstable emotion. Suggestions for improvements are put forward in the conclusion part.

Keywords: negative effect; tooth extraction; cardiovascular disease; the elderly

1. Introduction

A major current situation for modern societies is that the population of the elderly is gradually increasing and more than a half of them have different and complicated cardiovascular disease. Due to various reasons of oral diseases, the elderly may be cured by tooth extraction. It is universally known that extraction is also a operation which can bring risks, such as the risks of increased heart rate and soaring blood pressure. Kaumudi claims that periodontal disease is closely related to coronary heart disease.^[1] In a word, knowing some negative effect of tooth extraction on cardiovascular is necessary.

There are many factors influencing the potential risk of tooth extraction which are time, psychology, anesthetic effect and cardiac function.^[2]

Nowadays, the population of elder is increasing and most of them have different and complicated various cardiovascular diseases. Among these elder people, they maybe have some toothache, besides, the tooth extraction is most commonly used.

In view of the practical need of research, some specialists did an observation on the elder people whose average age was seventy and also suffered from hypertension and cardiopathy. The elder aboved-mentioned underwent the tooth extraction after the dentists confirmed that they were in good congiton. However, cardiac arrhythmia and other heart problems were occurred on nearly half of the patients during the extraction. It can be said with certainty that it is the effect of the age and cardiovascular diseases that the heart function is weakened, so the proportion of the happening of potential risk is higher.

As has been mentioned above, exploring the change of cardiovascular during the extraction is necessary to the research of negative effect.

The purpose of the paper is to explore the negative effect of tooth extraction on cardiovascular disease for the elder and reduce the risks during the operation helpfully. The negative effect is divided into two sides, pshiology and psychology. Then the elderly patients were observed the reaction and condition with continuous ECG (electrocardiogram) and blood pressure monitoring during the extraction. The specialists consider that the main factors of arrhythmia are mental tension, long extraction time and poor anesthesia effect for the elderly. All these stimuluses can make the body under stress and increase the activity of nervous system so that myocardial oxygen consumption rises gradually that could break the balance between the heart and oxygen.^[3]

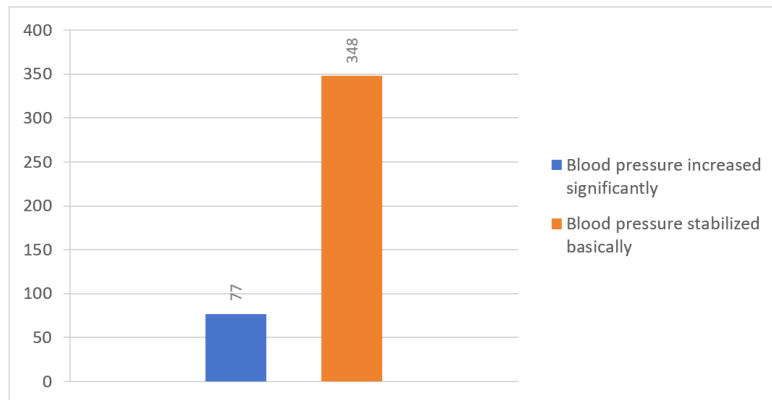
2. Method

To explore the negative effect on the change of physiology during the extraction, 295 elderly patients with cardiovascular disease in which female were 148 who were selected from The Ninth People's Hospital Affiliated to Shanghai Second Medical University in 1994. Among them, the age ranged from 60 to 83 and their health condition is in accordance with the indication of tooth extraction. In 295 cases, 84 cases were coronary heart disease and 114 cases were hypertension. These elderly patients both used continuous ECG and blood pressure monitoring during the extraction. Then, it chose 32 elderly patients to explore the negative effect on the change of psychology and

observed the reactions.^[4]The most important thing for the elderly with chronic cardiovascular disease was fear, such as anaesthetization and the pain of extraction. In order to keep the environment quiet and relax the patients, all the patients were cared by the professional castody and took a semi recumbent position which was beneficial to the cardiovascular circulation.

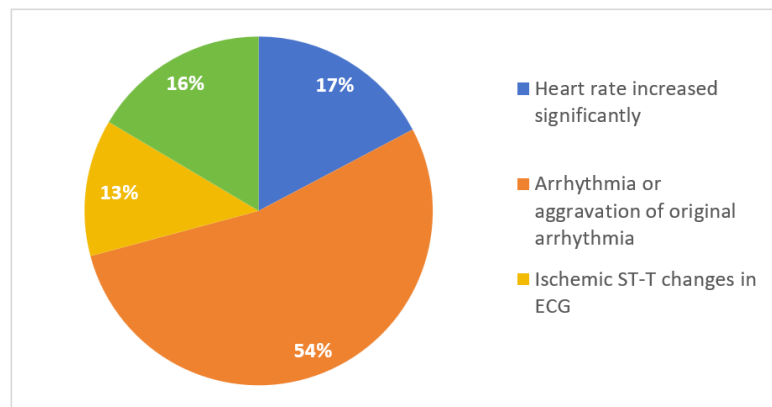
In a large number of experimental data, we selected the following data for further analysis which has typical characteristic results with representative significance.

Table: Comparison of the population of the elderly in the changes of the blood pressure during tooth extraction



(Source: Wang)

Pie chart: Potential risk symptoms of tooth extraction



(Source: Wang)

3. Result

The charts illustrate the potential risks of the main influencing factors of tooth extraction. On the one hand, the bar chart displays the numbers of the elderly with a stable blood pressure. It can easily be seen that the vast majority of persons hold a stable blood pressure under the monitoring in the course of the extraction. On the other hand, the pie chart shows the percentage of the change of cardiovascular system. The proportion of cardiac arrhythmia and aggravation of original arrhythmia takes up more than half of the area and the other three parts basically evenly divided. When coupled with the information of figures, leads to a possible conclusion that the principal negative effect on the change physiology during the extraction is cardiac arrhythmia.

4. Discussion

The purpose of this study is to explore the negative effect of tooth extraction on cardiovascular disease for the elderly and reduce the risks during the operation helpfully. The results imply that cardiac arrhythmia is the main negative effect in physiology and fear is the other effect in psychology.

According to the charts above, the bar chart indicates that most elderly patients do not have a large fluctuation of blood pressure during

tooth extraction because of the contrast between the two figures. The reason why can not cause great fluctuation is the innate depressor reflex of human body, which is a kind of cardiovascular reflex regulated by the nervous system. In this regulation, when arterial blood pressure rises sharply with the reasons of the body, the heart rate will slow down reflexively and the cardiac output will decrease, in addition, the blood vessel will dilate and peripheral resistance will reduce so that the blood pressure will drop finally. In the pie chart, these data suggest that the principal negative effect during the extraction is cardiac arrhythmia. Tooth extraction can cause various arrhythmias which lead to heart disease and hypertension. In most cases, tooth extraction is done under local anaesthesia so that the patients are in a state of consciousness during the operation. As a result, arrhythmias is related to the sympathetic excitation which is caused by tension, fear and incomplete analgesia during tooth extraction.

The findings of this study agree well with some of Wang's analysis, in that cardiac arrhythmia is the major negative effect of the elderly during tooth extraction and there are also other adverse symptoms, such as ischemic electrocardiogram, dizziness, chest tightness, angina pectoris and so on. According to the specialists, even for the elderly patients with cardiovascular disease who meet the indication of tooth extraction, the operation may bring a certain risk. It is essential to include the significant increase of blood pressure and heart rate into the potential risks during the extraction. The reason for this is to consider that at this time, the oxygen consumption in the heart muscle cell climbs sharply, so the heart is overburdened. It is generally accepted that patients with cardiovascular disease may have more complications in the course of the tooth extraction.

Some patients have pain after tooth extraction which is not expected initially. Wu claimed that pain after tooth extraction was often caused by hard tissue trauma, which might be caused by the trauma of instruments to bone tissue during tooth extraction in 2002. If the treatment is not meticulous after the extraction, leaving sharp bone margin on the soft tissue trauma can also cause the other pain. Postoperative pain can lead to increased blood pressure, faster heart rate and aggravation of the original condition.

These results contradict the original hypothesis in some areas because it is surmised that the negative effects may contribute to the positive motivation. The safety of tooth extraction of the elderly patients with cardiovascular disease is deserved attention widely. For instance, it is suggested that many dentists are willing to do more detailed examinations and make a better treatment plan when they conduct preoperative preparations for the elderly patients as well as do more comprehensive intraoperative monitoring in order to avoid risks probably. The main reason why many dentists choose to use the risk scores is that the risk of the complications which may be caused by the older age and increased comorbidities and the risk scores could help the doctors make sure the risk of complications usefully.^[5] A majority of doctors tend to give more humanistic care to the elderly by showing solicitude for the emotional changes of the elderly patients and give psychological guidance in time. In addition, it seems that most elderly patients would pay more attention to their physical condition and do exercises more actively.

5. Conclusion

The finding has important implications for the curing the elderly in tooth extraction. There are several suggestions to reduce the occurrence of potential risks. First of all, it is required to pay attention to the medical history before extraction and do some physical examination and routine ECG monitoring if necessary.^[6] Second, the time of extraction should be shortened properly. The cardiac function of the elderly patients with cardiovascular disease is too weak to bear long-term extraction. In order to solve this problem, it is recommended to operate by skilled dentists, and the number of tooth extraction should not be much each time. Next, doctors ought to pay attention to the psychological changes of the elderly to make them eliminate fear and increase confidence. In addition, the medical staff should communicate with the elderly patients deeply, explain and analyze the condition of the treatment and the situation of anesthesia and extraction in detail as possible as they can, which has a good role in relieving the tension and anxiety of the patients. Forth, patients with cardiovascular disease need effective psychotherapy and dental knowledge so that the patients with cardiovascular disease can relieve tension and ensure the safety of patients before tooth extraction.^[7] Finally, preparing the first aid medicine and equipment is important to deal with emergencies.^[8] The limitations in this study might have problems. It had collected one statistics, there were not multi-dimensional and multi angle data had been collected. Hence the results of the study should be treated with caution. We hope that this paper can inspire more researchers in this field to carry out more detailed and in-depth research in this field. Further research is recommended to analyze the effect of the dose of anesthetics on tooth extraction.

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Fuzzy pricing of European options based on Liu process

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Abstract: Many studies have found that in addition to randomness, financial markets also have ambiguity. In order to better address this issue, this article introduces fuzziness into option pricing models and conducts in-depth research on existing fuzzy stock models.

Firstly, based on the generalized stock model of the standard Liu process, the corresponding option pricing formula was derived. Then, this article studied the generalized multi factor pricing model and derived the corresponding European option pricing formula. In order to make the research results more specific, this article provides specific examples of European options and corresponding chart analysis

This research achievement not only enriches the theory of option pricing, but also provides new methods and basis for option pricing in actual financial markets.

Keywords: credibility theory; Liu process; Fuzzy differential equation; Generalized multi factor price model

1. Introduction

Fuzzy option pricing is a cutting-edge research direction in the field of financial derivatives, mainly studying option pricing problems in fuzzy uncertainty environments. The study of fuzzy option pricing can provide more accurate and reliable information and guidance for investment decisions in financial markets, helping to reduce investment risks and improve market efficiency.

In real life, financial markets often have uncertainty and ambiguity, and traditional option pricing models cannot adapt well to this situation. Therefore, studying the pricing problem of fuzzy options has important theoretical and practical significance.

In recent decades, option pricing has developed rapidly. The Black Scholes model (abbreviated as B-S model) was first proposed by Black and Scholes, which obtained the price differential equation of financial derivatives without dividend and transaction cost payments. The B-S model is also the most classic option pricing model and has been widely applied in the financial field. Since then, option pricing has become a hot topic in financial market research. Merton first used Brownian motion to describe interest rates. Zadeh first proposed the concept of fuzzy sets, and then proposed possible metrics that can be used to quantify fuzzy events. Later, these theories gradually developed into today's fuzzy set theory, which was also the beginning of fuzzy mathematics. Although fuzzy set theory can be used to measure fuzzy events, there has been no effective method or theory for a long time. It was not until Liu proposed a credibility measure with self duality property that it developed into credibility theory and became an important theory for handling fuzzy events. Fuzziness is an important characteristic of option pricing. Based on credibility theory and Liu process, Zhang Yuanyuan established several types of fuzzy investment portfolio models and derived corresponding option pricing formulas using expected value method and actuarial method. Bo introduced the fuzzy interest rate model and fuzzy term structure, and derived the option pricing formula under fuzzy interest rates. Therefore, it is necessary to study option prices in fuzzy environments. As a common underlying asset in the financial market, if fuzziness can be added to the stock model, it can better explain the actual dynamic changes of stocks and be more in line with the actual situation

Firstly, many scholars have conducted in-depth research on fuzzy options and proposed a good model, such as the Liu stock model, the high stock model, and the general stock model. Most of these models are driven by geometric Liu processes. However, there is relatively little research on the stock model of mean regression, and the stock price model of mean regression can better explain the actual situation. Therefore, studying the mean regression model of the stock market is of great significance.

In addition, we can also consider the payment of dividends and transaction costs to make the resulting model more realistic. On this basis, this article studied a generalized stock model based on the standard Liu process and conducted numerical simulations.

2. basic concepts

Definition 1.1 Fuzzy variables are derived from the plausibility space (Ω, \mathcal{P}) maps to the set of real numbers function on the Where, this a non-empty set, thebethe power set of is a plausibility measure.

An aggregate function is called a plausibility measure if it satisfies the following four conditions.

- (1) $Cr\{\emptyset\} = 1$;
- (2) $Cr\{A\} \leq Cr\{B\}$ When $A \subset B$ time; and
- (3) $Cr\{A\} + Cr\{A^c\} = 1$, for any $A \in \mathcal{P}$;
- (4) $Cr\{\cup_i A_i\} = \sup_i Cr\{A_i\}$, for any A_i Both $\sup_i Cr\{A_i\} < 0.5$.

In order to describe fuzzy variables mathematically, the following definition of expected value of fuzzy variables is introduced. fuzzy variables ξ The expected value of is defined as that

$$E[\xi] = \int_0^{\infty} Cr\{\xi \geq r\} dr - \int_{-\infty}^0 Cr\{\xi \leq r\} dr$$

At least one of the two integrals is finite.

In order to compute the expectation value, it is necessary to introduce the following plausibility inversion theorem.

Hypothesis ξ is a fuzzy variable and that is its affiliation function. Then for any set of real numbers B

$$Cr\{\xi \in B\} = \frac{1}{2} (\sup_{x \in B} v(x) + 1 - \sup_{x \in B^c} v(x)).$$

Liu Process C_t is a fuzzy process that satisfies the following four conditions

1. $C_0 = 0$;
2. C_t About any Both have smooth increments; and
3. C_t About any Both have independent increments; the
4. $C_{k+1} - C_k$ is a fuzzy variable with normal distribution and a mean value of et , with a variance of $\sigma^2 t^2$, whose affiliation function is

$$\mu(x) = 2(1 + \exp(\frac{\pi|x - et|}{\sqrt{6}\sigma t}))^{-1}, \quad x \in R$$

In particular, when $e=0$ and $e=1$ The Liu process becomes a standard Liu process The standard Liu process is a special case of Liu process The fractional Liu process, as an extension of the Liu process, is more in line with the actual situation. Therefore, it is very important to study the fractional Liu process The definition of fractional Liu process is given below

Definition 1.2 Assumptions Z_t is a fuzzy process. C_t It is a standard Liu process. In the interval $[a, b]$ inserted arbitrarily in the $k+1$ The interval is divided by a number of points, and there are $a=t_1 < t_2 < \dots < t_{k+1} = b$, and assuming that

$$\Delta = \max_{1 \leq i \leq k} |t_{i+1} - t_i|.$$

$$\text{If when } \Delta \rightarrow 0, \quad \lim_{\Delta \rightarrow 0} \sum_{i=1}^k Z_{t_i} (C_{t_{i+1}} - C_{t_i})$$

exists almost everywhere, then the limit is said to be a fuzzy process Z_t About C_t Liu integral of

$$\int_a^b Z_t dC_t = \lim_{\Delta \rightarrow 0} \sum_{i=1}^k Z_{t_i} (C_{t_{i+1}} - C_{t_i})$$

In turn, it is claimed that About Liu integrable of

3. fuzzy stock models

Definition 1.3: Generalized multifactor price model

$$\begin{cases} dX_t = rX_t dt \\ dY_{it} = (m_i - \alpha_i Y_{it}) dt + \sum_{j=1}^n \sigma_{ij} Y_{it}^{\beta_j} dC_{jt}, \quad i = 1, 2, \dots, m; j = 1, 2, \dots, n, \end{cases}$$

Among them $r, m_i, \alpha_i, \beta_j, \sigma_{ij}$ respectively, for the determination of the $i=1, 2, \dots, m, j=1, 2, \dots, n$ is a definite real number. That is, the model

has that n Independent Liu processes and m+1 Equations.

$$\begin{cases} X_t = X_0 \exp(rt) \\ Y_{it} = \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}) + \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} dC_{js}, i = 1, 2, \dots, m; j = 1, 2, \dots, n. \end{cases}$$

Proof: By $dX_t = rX_t dt$ Get $\frac{dX_t}{X_t} = r dt$, whereupon the two-sided integral yields $X_t = C \exp(rt)$. Ordert = 0 Get $X_t = X_0 \exp(rt)$.

$$\begin{aligned} d(\exp(\alpha_i t) Y_{it}) &= \alpha_i \exp(\alpha_i t) Y_{it} dt + \exp(\alpha_i t) dY_{it} \\ &= \alpha_i \exp(\alpha_i t) Y_{it} dt + \exp(\alpha_i t) [(m_i - \alpha_i Y_{it}) dt + \sum_{j=1}^n \sigma_{ij} Y_{ij}^{\beta_j} dC_{jt}] \\ &= m_i \exp(\alpha_i t) dt + \exp(\alpha_i t) \sum_{j=1}^n \sigma_{ij} Y_{ij}^{\beta_j} dC_{jt} \end{aligned}$$

Two sides of the score

$$\exp(\alpha_i t) Y_{it} - Y_{i0} = m_i \int_0^t \exp(\alpha_i s) ds + \exp(\alpha_i t) \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} dC_{js}$$

Processing the first integral yields that

$$\exp(\alpha_i t) Y_{it} - Y_{i0} = \frac{m_i}{\alpha_i} \exp(\alpha_i t) - \frac{m_i}{\alpha_i} + \exp(\alpha_i t) \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} dC_{js}$$

$$\text{So } Y_{it} = \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}) + \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} dC_{js}.$$

Therefore, the proposition is proved.

Theorem 1.5 Suppose that X_t is the price of the bond, and Y_t is the stock price, and X_t and Y_t satisfies model (2.1), then the European power call option price equation is given by

$$\begin{cases} f = \theta \exp(-rT) \left(\int_J^{+\infty} \left(1 + \exp\left(\frac{\pi v}{\sqrt{6} (\sum_{j=1}^n \int_0^T \sigma_{ij} Y_{ij}^{\beta_j} (js)^{-\alpha} djs)} \right) \right)^{-1} U_1 dv, J \geq 0 \right. \\ \left. f = \theta \exp(-rT) U_2, J < 0, \right. \end{cases}$$

$$\begin{aligned} U_1 &= [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{(\theta-1)} \\ U_2 &= \int_J^0 \left(1 - \left(1 + \exp\left(\frac{\pi v}{\sqrt{6} (\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} (js)^{-\alpha} djs)} \right) \right)^{-1} \right) \end{aligned}$$

$$\begin{aligned} \text{Among them:} & \times [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{(\theta-1)} dv \\ & + \int_0^{\infty} \left(1 + \exp\left(\frac{\pi v}{\sqrt{6} (\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} (js)^{-\alpha} djs)} \right) \right)^{-1} \\ & \times [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{(\theta-1)} dv. \end{aligned}$$

Proof: According to the definition of expected value of fuzzy variables, there are

$$\begin{aligned} f(Y_{i0}, K, m_i, \alpha_i, \beta_j, \sigma_{ij}, r) &= \exp(-rT) E[(Z_T^\theta - K)^+] \\ &= \exp(-rT) \int_0^{\infty} Cr\{(Z_T^\theta - K)^+ \geq x\} dx \\ &= \exp(-rT) \int_0^{\infty} Cr\left\{ \left(\frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}) + \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} dC_{js} \right) \geq (K + \frac{1}{x})^{\frac{1}{\theta}} \right\} dx \\ &= \exp(-rT) \int_0^{\infty} Cr\left\{ \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{ij}^{\beta_j} dC_{js} \geq (K + \frac{1}{x})^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}) \right\} dx \end{aligned}$$

$$\text{make } v = (K + x)^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}),$$

$$\begin{aligned} x &= [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^\theta - K, \\ \text{rule} \quad dx &= \theta [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{\theta-1} dv, x \in (0, +\infty). \end{aligned}$$

$$J = K^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}),$$

make

$$v \in (K^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}), +\infty) = (J, +\infty),$$

So there is

$$\begin{cases} f = \theta \exp(-rT) \left(\int_J^{+\infty} (1 + \exp(\frac{\pi v}{\sqrt{6}(\sum_{j=1}^n \sum_0^t \sigma_{ij} Y_{js}^{\beta_j} (js)^{-\alpha} djs)})^{-1} U_1 dv, J \geq 0 \right. \\ \left. f = \theta \exp(-rT) U_2, J < 0. \right. \end{cases}$$

Among them

$$U_1 = [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{\theta-1},$$

$$U_2 = \int_J^0 (1 - (1 + \exp(\frac{\pi v}{\sqrt{6}(\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} (js)^{-\alpha} djs)})))^{-1}$$

$$\square \times [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{\theta-1} dv$$

$$\square + \int_0^{\infty} (1 + \exp(\frac{\pi v}{\sqrt{6}(\sum_{j=1}^n \sum_0^t \sigma_{ij} Y_{ij}^{\beta_j} (js)^{-\alpha} djs)})))^{-1}$$

$$\square \times [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{\theta-1} dv.$$

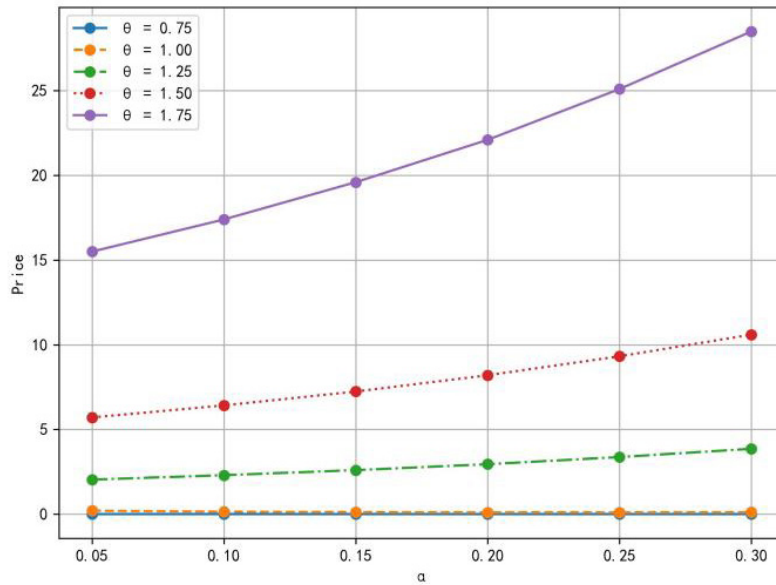
Rowe 2018 Research on Option Pricing Methods in Fuzzy Environments Suppose there is a one-factor European power call option, current stock price, strike price, annual risk-free rate, time to expiration, drift coefficient of the stock, diffusion coefficient, and the rest of the constants, respectively

$$Y_0 = 29, k = 30, r = 0.08, T = 0.25, \sigma = 1, m = 1, a = 1$$

, it follows from the theorem that the option price increases with And all the parameters are substituted into the European power call option formula and solved by python, as shown in Figure 3.1 below

$\alpha = 0.05$	2.73e-55	2.03e-01	2.04e+00	5.71e+00	1.55e+01
$\alpha = 0.10$	2.83e-49	1.46e-01	2.30e+00	6.42e+00	1.74e+01
$\alpha = 0.15$	8.72e-44	1.17e-01	2.60e+00	7.24e+00	1.96e+01
$\alpha = 0.20$	8.82e-39	1.05e-01	2.95e+00	8.20e+00	2.21e+01
$\alpha = 0.25$	3.19e-34	1.03e-01	3.37e+00	9.32e+00	2.51e+01
$\alpha = 0.30$	4.49e-30	1.10e-01	3.86e+00	1.06e+01	2.85e+01
	$\theta = 0.75$	$\theta = 1.00$	$\theta = 1.25$	$\theta = 1.50$	$\theta = 1.75$

and table 3.1



From Table 3.1, Figure 3-1, it can be seen that when $\theta=0.75$ and $\theta=1.00$ When, the range of option price changes is not large, and the color is lighter in Figure 3-1; when, the $\theta \in [0.75, 1.75]$ When fixed α , option prices along with θ The colors in Table 3-1 are progressively darker from left to right.

Theorem 3.1 Assume that X_t is the price of the bond, and Y_t is the stock price, and X_t and Y_t Meet the model (2.1), then the formula for the price of a European power put option is

$$\begin{cases} f = \theta \exp(-rT) U_1, J \geq 0 \\ f = \theta \exp(-rT) U_2, J < 0. \end{cases} \text{Among them Among them}$$

$$U_1 = \int_0^J \left(1 - \left(1 + \exp\left(\frac{\pi v}{\sqrt{6} \left(\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} (js)^{-\alpha} ds \right)} \right) \right)^{-1} \right) \times \left[v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right) \right]^{\theta-1} dv,$$

$$U_2 = \int_J^0 \left(1 + \exp\left(\frac{-\pi v}{\sqrt{6} \left(\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} (js)^{-\alpha} ds \right)} \right) \right)^{-1} \times \left[v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right) \right]^{\theta-1} dv.$$

Proof: According to the definition of expected value of fuzzy variables, there are

$$\begin{aligned} f(Y_{i0}, K, m_i, \alpha_i, \beta_j, \sigma_{ij}, r) &= \exp(-rT) E[(Z_T^\theta - K)^+] \\ &= \exp(-rT) \int_0^\infty Cr\{(Z_T^\theta - K)^+ \geq x\} dx \\ &= \exp(-rT) \int_0^\infty Cr\{Z_T \leq (K-x)^{\frac{1}{\theta}}\} dx \\ &= \exp(-rT) \int_0^\infty Cr\left\{ \left(\frac{m_i}{\alpha_i} + \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right) + \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} dC_{js} \leq (K-x)^{\frac{1}{\theta}} \right) \right\} dx \\ &= \exp(-rT) \int_0^\infty Cr\left\{ \sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} dC_{js} \leq (K-x)^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right) \right\} dx \end{aligned}$$

$$\text{make } v = (K-x)^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right),$$

$$\begin{aligned} x &= K - \left[v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right) \right]^\theta, \\ \text{Rule } dx &= -\theta \left[v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t) \left(Y_{i0} - \frac{m_i}{\alpha_i} \right) \right]^{\theta-1} dv, \quad x \in (0, K). \end{aligned}$$

$$\text{Make } J = K^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}),$$

$$v \in (K^{\frac{1}{\theta}} - \frac{m_i}{\alpha_i} - \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i}), 0) = (J, 0).$$

So there is

$$\begin{cases} f = \theta \exp(-rT) U_1, J \geq 0 \\ f = \theta \exp(-rT) U_2, J < 0 \end{cases}$$

$$\begin{aligned} U_1 &= \int_0^J (1 - (1 + \exp(\frac{\pi v}{\sqrt{6}(\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} (js)^{-\alpha} djs)})))^{-1} \\ &\quad \times [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{\theta-1} dv, \\ \text{Among them } U_2 &= \int_J^0 (1 + \exp(\frac{-\pi v}{\sqrt{6}(\sum_{j=1}^n \int_0^t \sigma_{ij} Y_{js}^{\beta_j} (js)^{-\alpha} djs)})))^{-1} \\ &\quad \times [v + \frac{m_i}{\alpha_i} + \exp(-\alpha_i t)(Y_{i0} - \frac{m_i}{\alpha_i})]^{\theta-1} dv. \end{aligned}$$

Theorem proved.

the price of zero-coupon bonds P^T The following fuzzy term structure equation is satisfied

$$\begin{cases} [\epsilon(t, r_t) - \varsigma_t \eta(t, r_t)] \frac{\partial P^T}{\partial r_t} + \frac{\partial P^T}{\partial t} - r_t P^T = 0 \\ P^T(T, r_T) = 1, \end{cases}$$

Among them r_t is the fuzzy interest rate that satisfies model (3.1), the ϵ and η It's about t and r_t function, the ς_t is the market price of risk.

If the price of a zero-coupon bond satisfies that

$$P^T(t, r_t) = \exp(M(t, T) - N(t, T)r_t)$$

Among them M , N about, respectively t, T of a definite real function, the r_t If it is a fuzzy interest rate satisfying the model (3.1), then the zero coupon bond price has a fuzzy affine term structure (FATS)

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A Critical Analysis About Strategic Management Accounting

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Abstract: Strategic Management Accounting (SMA) is important when operating a business. In most cases, SMA can facilitate a company's business and operations. Unlike traditional methods, SMA monitors the internal, external, financial and non-financial factors of the company, which is beneficial to the short and long term development of the company.

Keywords: Strategic Management Accounting

1. Introduction

Management accounting places an important role in the operation of a business through measuring, analyzing, and interpreting financial information to management. Strategic management accounting (SMA) is a form of management accounting focusing on company's external information (e.g. competitor analysis) and non-financial information (e.g. social and environmental impact) in order to develop and monitor business strategy (Lord, 2007). SMA attempts to integrate management accounting with other business functions (e.g., marketing) to improve the performance of a company. It indicates that accountants begin to pay attention to broader business issues rather than purely financial issues with the purpose of maintaining the accountant role as a key position in the modern business.

There are a lot of arguments for and against whether SMA makes contributions to strategy formulation and implementation. For example, Otley (2001) stated that SMA had a significant influence on the thinking of management accountants and managers, while Nixon & Burns (2012) argued that SMA has little impact on managerial discourse and practice. This report will analyze whether SMA has role to play when strategy is planned in a deliberate and rational way or in a non-deliberate and irrational way.

2. Conceptions of SMA

There are many conceptions of SMA. First, SMA attempts to connect management accounting with marketing management for strategic positioning (Roslender, 1995). This concept focuses on marketing tools used by companies and management accounting information utilized within those tools. Second, SMA integrates strategic ideas into management accounting. Companies utilize strategic tools and look for management accounting information that provides support for strategy. Third, SMA combine many contemporary management accounting approaches and technologies. A number of contemporary approaches to management accounting (e.g. Balanced Scorecard and value chain) are considered as strategic management accounting techniques because they consist of external and market orientated content (Kaplan and Norton, 2004). By now, there is no single and agreed definition of SMA (Langfield-Smith, 2008).

SMA has the following unique characteristics. First, it cares about external information about competitors so that it can evaluate a company's performance relative to peers in the industry. Second, SMA integrates accounting with strategic positioning. Third, it exploits linkages in the value chain, which includes a set of activities that a company takes to transform a product from idea to final product so that it can help the company to gain competitive advantages.

3. Strategy planned in a deliberate and rational way

3.1. Classic model

Classical model considers strategist as a rational economic man who seeks to get the highest satisfaction or pleasure from their economic decisions. In this case, managers behave in a rational and logical way during their thought processes. Classical model depends on two major assumptions that there is a stable and predictable external environment is and that key objective of the company is to maximize shareholder value. SMA plays a key role in strategic implementation because SMA cannot only help the company to reduce cost and generate more revenue, but also set up management controls and performance strategy.

In addition, SMA can help companies to value strategic options. Investment appraisal is the process that a company utilizes to determine which project it should accept. The most common investment appraisals include NPV, IRR, ARR, payback period and so on, all of which rely on management accounting data. In addition, companies also need to consider non-financial factors in making the investment decision, such as whether the project will make pollution to the environment or whether the project complies with social ethnicity. As SMA involves both financial and non-financial information, it can help the company to choose the best strategic option.

Moreover, SMA provides a support system at 'Strategic Analysis' level. From the classical perspective, SMA is long-term oriented and contain broad dimension. SMA enables a company to have a better understanding of the external environment it belongs to, internal resources it owns and growth potential it has, which is beneficial to the development of the company in the long run.

3.2. Systemic model

Under systemic model, SMA is still a support to 'rational planning'. However, what needs attention is that people are rooted in interwoven social systems and culture with specific values and rules. As cultural context affects planning choices, accounting focus changes under different culture. Western countries (e.g. the UK and the US) focuses on profit maximum, while the Japanese emphasize on 'market share'. Nowadays, as public pay more and more attention to Corporate Social Responsibilities, accounting begins to focus on long-run sustainability, including political & social influence and brand recognition. In addition, competition is complemented by alliances. For example, Guanxi, which is defined as a strong connection with someone involving moral obligations and favour exchange, is important in Chinese business culture. In most cases, a Chinese company with a strong Guanxi is able to overperform competitors.

Granovetter (1995) argued that the content of strategy and the process of making process is embedded in a network of social relations involving an extended company and wider community. SMA enables an organization to build and maintain good relationships with government, business partners and other parties so that they will provide helps to the organization. SMA makes a company to pay more attention to external factors, it will help the company to understand the culture and value of the society deeply and thus develop the most appropriate strategy to suit the society.

4. Strategy planned in a non-deliberate and irrational way

4.1. Processual Model

Processual model assumes that strategists have 'bounded rationality'. It means that when they make decisions, their rationality is limited by circumstances, events, personal biases, etc. Under processual model, strategies are emerged rather than deliberately planned. A series of decisions form a 'pattern' which gets more precise over time and may become 'formalized' as a strategy. There is no clear line between planning and implementation so that everyone can become a strategist. As strategy becomes a messy process, 'resource-based view' of strategy (RBV) becomes effective. Leaders decide how they can utilize their people and resources in order to catch market opportunities or handle different kinds of problems.

Emergent strategizing requires accounting to calculate contributions from short-term opportunities. For example, SMA can be used to calculate NPVs of different investment options, so that company can evaluate which investment project will produce maximum economic value. The resource-based strategy works as 'skill-building marathon', focusing on critical resources, such as PPE, intangible assets, knowledge capital. SMA is an essential way to 'win the marathon'. SMA can help a company not only utilize these resources effectively and efficiently to promote its business operation, but also develop and build skills based on new performance measurement systems.

4.2. Evolutionary Model

Under evolutionary model, there is too much uncertainty in life so that a formal, deliberate strategy cannot work. Evolutionists consider the environment as unpredictable, and thus they believe the company should make efforts on increasing both strategic and organizational 'clock speed' in order to respond quickly to emerging situations (Nadler and Tushman, 1999). As maximizing profit is considered to be the most crucial objective of a business, a significant competitive advantage is relatively efficient. The short-term strategy focuses on how to re-

duce costs and earn high profit. Therefore, accounting becomes central to cost control, and SMA plays a significant role.

SMA can help the company get a high profit in short-term through cost control and optimal use of resources. For example, activity-based management (ABM) can help a company allocate production cost to different activities. Therefore, the company can find out what activities is cost-consuming and thus make an improvement to reduce cost and increase profit. Besides, variance analysis is also practical. The unfavourable efficiency and price variance can tell companies the problems in their operations, and thus they can find the related solution. If the labour efficiency variance is unfavourable, it shows that the employees do not work efficiently in the production process so that the company should provide more training to employees to improve their production skills. Moreover, SMA can help a company make rapid decisions based on given information therefore to survive in the uncertainty environment.

5. Limitations of SMA

Under processual model and evolutionary model, when strategists are irrational, and strategy is planned non-deliberately, the effectiveness of management accounting technique or SMA system relies a lot on how it is utilized and on the extent to which it is a part of the organizational system and strategic process. If SMA doesn't integrate with other management systems, SMA cannot work effectively. Some researchers argue that strategic decisions not always based on financial considerations – intuition, judgment, etc. and value chain & cost analysis can be made without SMA. In addition, Pavlatos & Kostakis (2018) found that the manager's education and background have an impact on the effectiveness of SMA. If managers lack sufficient education and don't realize the importance of SMA, SMA doesn't have a role to play in the company.

6. Conclusion

Under processual and evolutionary model, when strategist is an irrational man and strategy is not deliberately planned, SMA might be unable to work effectively if SMA doesn't fully integrate with other management systems. However, in most of the case, SMA can promote the business and operation of a company. Different from the traditional approach, SMA provides oversight of the internal, external, financial and non-financial factors of a company, which is beneficial to its development both in the short-term and long term.

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Study on the influence of rural cadres and mass orientation on mass satisfaction in Anhui Province

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Abstract: Good mass orientation helps rural cadres to pay attention to the needs of the people, understand the sufferings of the masses, do practical things for the people, solve difficulties, enhance the sense of identity and participation of the rural revitalization work. This paper is aimed at the investigation of the influence of rural cadres in Anhui province on the satisfaction of the masses, and puts forward constructive suggestions on improving the relationship between rural cadres and the satisfaction of the masses.

Keywords: rural cadres and masses oriented masses satisfaction cadres and masses relationship

1. The significance of advocating good mass orientation

1.1. For rural cadres and the grassroots people

For rural cadres, good mass orientation can strengthen their sense of responsibility, always take the development of rural economy as an important task in their daily work, always remind cadres to put the needs of farmers' production and life in mind, and coordinate and promote the smooth development of rural revitalization cause. It is also conducive to the rural cadres to comprehensively improve their quality, attach importance to learning, meet the needs of modern rural revitalization, and provide intellectual and technical support for the promotion of the rural revitalization cause.

For the grass-roots people, a good mass orientation can effectively help the villagers to express their true inner needs, help them to keep in close contact with the rural cadres, and improve the sense of satisfaction and happiness of the villagers.

1.2. For the society and the country

Under the background of the new era, the mass orientation of rural cadres' emotional intelligence is an important work content in the implementation process of the rural revitalization strategy, which is related to the image and credibility of the Party and the government. The mass orientation of rural cadres directly affects their prestige in the mass work. It is an important way to enhance the awareness of rural cadres and the masses to promote the implementation of the rural revitalization strategy under the background of the new era.

2. The connection between mass orientation and mass satisfaction

2.1. Domestic and foreign studies

2.1.1. Status of domestic research

Compared with foreign scholars, domestic scholars have limited research based on customer-oriented factors and behavioral results, and the main representative studies related to this topic are as follows:

From the perspective of customer orientation, Pan Chenglie (1995) believes that customer orientation must first think about what the customer thinks, and want to be in front of them, in order to provide customers with the products or services they expect. The main goal of customer orientation is how to make customers satisfied. Bao Guoxian and Sun Jiaxian (2006) believed that after introducing the principle of "customer-oriented", the government management focused on the quality of public services, regarded the government service object as "customers", put forward the principle of "customer on" in the public sector, and emphasized that public goods and services should satisfy "customers". Shu Lifang, Wei Haiying and Ran Yaxuan (2019) believe that the core of customer orientation for front-line employees is to be customer-centered, identify and meet customer needs, and pay attention to long-term customer relationship.

In view of the influencing factors of customer orientation, Xu Lei, Li Ji and Guo Jing (2022) discussed the influence of ambivalence

differences on different levels of customer-oriented civic behavior at different levels based on social exchange theory and self-loss theory. Chen Qiuping and Liu Zijuan (2022) build on the theory of self-determination, the results show that the error management atmosphere will significantly increase the customer-oriented deviation of employees; “I should” and “I can” are the important factors that produce employee customer-oriented deviation. Yu Wei and Zhang Yan (2010) found that female senior hotel employees interfering with their family and work led to emotional exhaustion, and thus weakened their customer orientation.

The results of customer-oriented research show that domestic scholars have made useful explorations in recent years in aspects related to customer orientation and employee active behavior (Zhang Lingling, 2021), sales performance or corporate performance (e. g., Peng Xuebing, Xu Hao, Liu Yue and Huang Jie, 2023; Yang Chuanxian, Zhang Lei, 2015), repurchase intention (Lin Minghui, 2021).

2.1.2. Status of foreign research

Foreign scholars have conducted in-depth research based on customer-oriented factors and behavioral results. The main representative studies related to this topic are as follows, mainly reflected as follows:

Customer-oriented perspective Customer-oriented customer of Se and Weitz (1982), customer-oriented attitude and customer-oriented behavior of Stock and Hoyer (2005), customer-oriented COSE of Kim (2008), model and Kopalle, Kumar And Subramaniam (2020), In particular, Saxe and Weitz (1982) initiated the Sales Staff Customer oriented (SOCO) evaluation scale, Using empirical methods to develop 12 positive and negative items to measure sales staff customer orientation, It lays a solid foundation for the subsequent customer-oriented evaluation from many perspectives.

For the customer-oriented model, Mediano and Ruiz-Alba (2020) studies have demonstrated the significant importance of service employee customer orientation in highly relational services. Various dimensions of customer orientation of service personnel have different importance, including trust, loyalty and co-creation. Poddar, Naveen and Wei (2009) extend the concept of salesperson customer orientation to Internet marketing by conceptualizing and studying the impact of website customer orientation on perceived website quality and consumer behavior. This study also applies the concept of brand or store personality to Internet marketing by studying the impact of website personality on perceived website quality and consumer purchase intention. Stock and Hoyer (2005) provide a two-dimensional conceptualization that distinguishes attitudes and behaviors, exploring the direct and indirect effects of customer-oriented attitudes on customer satisfaction.

2.2. The connection between mass orientation and mass satisfaction

Adhering to the people-centered approach is the Party’s fundamental governance philosophy. General Secretary Xi Jinping has stressed that the whole Party must adhere to the fundamental purpose of serving the people wholeheartedly, strengthen the views of the people, and implement the mass line. The grass-roots level is the “nerve endings” of the national governance system. As the “neurons” on the “nerve endings”, grass-roots cadres are closest to the masses and closely. What they say and do what they have done, the masses can see and keep in mind. Therefore, the mass orientation of grassroots cadres will directly affect the happiness index of the masses. To put the people first, we must never stop at theory, but must be implemented in the great practice of the Party governing the country. This requires that we must follow the Party’s mass path well. Is the development of the grassroots, service the forefront of the masses, complicated work, grasp the implementation is the important work at the grassroots level and rural cadres as the key bridge connecting the party and the masses, on the basis of the familiar with the policy, policy of the party’s important spirit and policy propaganda to the grassroots, preach to the people heart, to obey the policy, consciously according to the policy, play a role model.

3. Suggestions and countermeasures for rural cadres to improve the satisfaction of the masses

3.1. Rural cadres need to continue to strengthen the work style construction.

Only by increasing the people’s sense of security and satisfaction as the goal, and effectively handling hot and difficult problems, can we truly solve the problems, achieve the convenience and benefit to the people, and then fully implement the primary accountability system and one-stop service. In the face of the masses to consult the matters and handle the basis, as far as possible to inform at one time, in the masses to meet the required materials and relevant procedures are complete, should be handled at one time. We will ensure that all applica-

tions are accepted and handled in a timely manner and in accordance with the law, so that the people can truly feel happy.

3.2. Strengthen the education and training for the masses, and improve the governance capacity.

For rural revitalization, ideological guidance is the key. Relying on the existing school resources, establish farmers party school, combining the reality of rural work, using 2-3 days a month, organize regular village committee members in farmers party school training, combined with the menu type training, invite provincial, municipal party school famous teachers or related industry experts to the farmers party school for the teaching, a clock system, the farmers party school work implementation into party construction scope, quarterly to carry out a special supervision, regular bulletin, to ensure that village cadres ability improve learning training does not discount, improve the level of village cadres governance in accordance with the law and the ability to work.

Implement the main responsibility, enhance the work enthusiasm, and have a clear division of responsibilities.

Rural work has many ideas, complicated things, the construction of a good branch, the work responsibility is strictly implemented in place, enhance the enthusiasm of cadres work is an important organizational guarantee to achieve rural revitalization. County party committee should carefully control the implementation of the strategy of rural revitalization, timely develop county accord with the actual situation, convenient operation, has the realistic guiding significance of arrangement, develop all kinds of booster rural revitalization support policy, the implementation of the district industry departments main body responsibility, the rural revitalization strategy each work strictly to the specific head, do department, villages and towns (street), the village party organization and the village committee responsibility division of responsibilities, to ensure that the country revitalization strategy implementation smoothly.

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Physical Experiment Simulation Based on Virtual Reality (VR) and Augmented Reality (AR) Technology

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Abstract: The application of virtual reality (VR) and augmented reality (AR) technology in physics education provides students with new learning opportunities and experiences. The purpose of this study is to explore how to use virtual reality (VR) and augmented reality (AR) technology for physics experiment simulation to improve the effectiveness of physics education. By creating a virtual experimental environment, students can simulate various physical experiments to enhance their understanding and practical skills. This article will explore the design and development of virtual experimental simulation systems, learning effectiveness evaluation, and teaching practice applications.

Keywords: virtual reality; Augmented reality; Physical experiment simulation; Physics education

1. Introduction

Traditional physics education often faces problems such as restricted experimental conditions, insufficient equipment, and safety hazards, which limit students' participation in and understanding of physics experiments, and make it difficult to stimulate students' interest and motivation in physics learning. The development of virtual reality (VR) and augmented reality (AR) technologies has brought new opportunities for physics education. Through the use of VR and AR technologies, highly immersive and realistic experimental environments can be created to provide students with more experimental opportunities and space for independent learning, fully mobilize students' interest and initiative in learning, and improve the quality of physics teaching so as to enhance their physics learning outcomes.

2. Background to the study

The new standard focuses on scientific inquiry and strengthens scientific thinking, using emerging information technology, it is possible to design richer, more colorful and close-to-life experimental content, and to display more uniquely appealing physical phenomena. VR and AR technologies can create highly immersive and realistic experimental environments. Traditional physics experiments are often limited by experimental conditions, and VR and AR can solve this problem. Students can enter a simulated experimental environment to operate and observe through virtual reality headsets or augmented reality devices. They can experience first-hand how the laws of physics work and feel the effects of real experiments, so that they can better understand and memorize the relevant knowledge. VR and AR technology can also provide students with more experimental opportunities and independent learning space. In traditional physics classrooms, experimental equipment and time are often limited, resulting in students not being able to fully participate in experiments and exploration. With VR and AR technologies, on the other hand, students can conduct experiments anytime, anywhere and are no longer constrained by time and location. They can choose their own experimental projects, explore physical phenomena, and develop hands-on and problem-solving skills through the virtual experiment platform.

3. Content and methodology of the study

3.1 Experimental design

This study will adopt the method of designing and developing virtual experiment simulation systems for different grades and contents by combining teaching theories and practical experiences in the field of physics education. Firstly, a demand research is conducted to understand students' needs and expectations of physics experiments and to determine the functions and characteristics of the virtual experiment simulation system.

Next, virtual reality and augmented reality technologies are used to create realistic virtual laboratory environments and develop corresponding interactive interfaces and operations. Through the use of high-quality 3D models, real physics engines and realistic physical effects,

students are able to perform various physical experimental operations, such as measuring, building experimental devices, and changing experimental parameters, in the virtual laboratory. At the same time, augmented reality technology is utilized to combine the virtual experimental scene with the real environment so that students can observe and operate on real objects.

3.2 Data analysis

Mean scores and standard deviations were calculated for the pre- and post-test scores and, questionnaires. In order to compare the validity of the students' gain in knowledge of physics concepts before and after the experimental improvement, Mann-Whitney's U test (two-tailed, $\alpha=0.05$) was conducted to determine significant differences between the groups on the existential questionnaire and interaction data.

A total of 38 students completed the experiment and filled out the questionnaire form, and the questionnaire data were analyzed using SPSS 25. 18 students (47.4%) indicated that they had never used a VR device before, 19 students (50.0%) had used a VR device occasionally, and 1 student (2.6%) indicated that he or she had extensive prior experience using VR. Meanwhile, only 3 students (7.9%) indicated that they had some prior experience with force feedback devices, and the remaining 35 students (92.1%) had never used related devices before.

Mann-Whitney's U test (two-tailed, $\alpha=0.05$) was used to compare the scores of the experimental and control groups. The experimental group scored 0.855, 0.771, 0.838, and 0.805 on the four main factors of the test, for an overall score of 0.918. The control group scored 0.832, 0.901, 0.879, and 0.777 on the four factors, for an overall score of 0.937. The results indicated that the experimental group received higher scores on each factor.

In order to assess the learning effect of the virtual laboratory simulation system in physics education, this study will use a comparative research method between the experimental group and the control group. One part of the students will be assigned to the experimental group to learn physics experiments using the virtual experiment simulation system; the other part of the students will be used as the control group to learn physics experiments using traditional methods. The effectiveness of the virtual laboratory simulation system in improving students' learning outcomes will be assessed by comparing the differences between the two groups of students in terms of academic performance, laboratory skills and learning motivation.

4. Conclusions of the study

4.1 Academic Achievement Enhancement

Students' understanding of physics concepts and mastery of experimental skills improved significantly when they used the virtual lab simulation system. By actually operating the equipment and performing various experimental operations in the virtual lab, students were able to gain a deeper understanding and application of the physics knowledge they had learned. This hands-on approach to learning motivates students to achieve better academic results in their physics studies.

4.2 Increased interest and participation

Students generally believe that virtual laboratory simulation systems can increase their interest and participation in physics experiments. Traditional physics laboratory teaching is often a one-way transmission of knowledge by the teacher, while the use of virtual laboratory simulation systems to assist teaching methods can break this one-way transmission situation. Through the realistic virtual experimental environment and interactive operation, students are able to participate more actively in the experimental process and experience the fun and challenges of experimentation. This active participation and engagement promotes their positive attitude and enthusiasm for physics learning.

4.3 Increased flexibility and scalability

The virtual lab simulation system is highly flexible and scalable. Physics experiments of different grades and contents can be designed and developed through the system, and adjusted and updated according to students' needs. This provides more choices and possibilities for physics education and enables teachers to make flexible teaching arrangements according to the actual situation of students.

5. Discussion and application

5.1 Introduction of virtual laboratory simulation system in educational institutions

Based on the results of the study, educational institutions may consider incorporating a virtual lab simulation system into their physics curriculum. Such a system can provide students with a safe, convenient and interactive learning environment that helps them better understand and apply physics concepts. By actually operating virtual laboratory equipment and performing various experimental manipulations, students are able to learn physics in greater depth and improve their skills in physics experiments.

5.2 Stimulate students' interest in learning physics

Virtual experiment simulation systems can increase students' interest and motivation in participating in physics experiments. Through realistic virtual experimental environment and interactive operation, students can participate in the experimental process more actively and experience the fun and challenge of the experiment. For example, through the VR/3D virtual simulation laboratory, students can experience the experimental process and understand the experimental principles without the laboratory. In observing the abstract microscopic electric field lines and magnetic field lines, VR technology can be used to visualize the electric field lines and magnetic field lines, so that students can be immersed in a different physical world. Educational institutions and teachers can take advantage of this feature to design attractive virtual experiment scenarios to stimulate students' interest in physics learning and increase their motivation to learn.

5.3 Optimize the design and user experience of the virtual experiment simulation system

Optimization and improvement are needed to further enhance the effectiveness and continued application of virtual lab simulation systems. Researchers can continue to explore in depth the application of virtual reality (VR) and augmented reality (AR) technologies in physics education to improve the fidelity and interactivity of the system. There is also a need to consider the user experience so that the system interface is user-friendly and easy to use, and provides clear instructions and feedback to ensure that students are able to make full use of the virtual lab simulation system for their learning.

5.4 Promote and share best practices

Educational institutions and teachers can actively promote and share best practices in the use of virtual laboratory simulation systems. By exchanging experiences and sharing cases, cooperation and sharing in the educational field can be promoted to further improve the quality and effectiveness of physics education. In addition, researchers can collaborate with educational practitioners to develop virtual experiment simulation systems in more fields to meet different educational needs.

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Luxury sustainable design for Gen Z

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Abstract: The rise of Gen Z consumers has hit the luxury industry, placing new demands on sustainable design for luxury goods. This paper will discuss the rise and popularity of the concept of sustainable design in the consumer group of Generation Z. Through the analysis of the necessity of developing sustainable design in the luxury industry and the change of consumption concept of Generation Z consumers, it will propose new ways for the sustainable development of the luxury fashion industry for Generation Z consumers.

Keywords: Luxury; Sustainable; Generation Z; Fashion

1. Introduction

Sustainable design has been a hot topic in the luxury fashion world for years. The rise of Generation Z is rapidly changing the landscape of the entire luxury fashion industry, with sustainable design becoming a major selling point for luxury brands and attaching importance to the ethics and sustainability of luxury brands.

2. Sustainable luxury products are popular among Gen Z consumers

Generation Z refers to the generation born between 1995 and 2000, which grew up rapidly with the development of the Internet.^[1] Gen Z is becoming a major consumer in the luxury industry, with a passion for environmental protection, individuality and freedom, and Bain & Company notes that Gen Z consumers are having a significant impact on brands' efforts to promote sustainable design.

Sustainability is one of the major social trends in recent years. Henri Pinault, CEO of Kering Group, took the lead in putting forward that "the luxury industry and sustainable development are integrated", and CAI Jinqing, president of Greater China, also put forward that "sustainable development can create value for enterprises", subtly influencing the consumption concept of Generation Z consumers.

The concept of sustainable development has gradually entered the vision and life of Generation Z consumers. Firstly, the sales channels have shifted to online. For example, Versace opened its online shopping platform in July 2018, and Dior opened its online store^[4] in China in July 2019.^[5] Kering Group took the lead in researching and publishing the "Fashion Industry Environmental Protection Agreement" in 2019 to promote sustainable development.^[6] Finally, luxury brands are paying more attention to sustainable design in the production of their products. These changes are the result of the concept of sustainable development and the rapid upgrading of the Internet.

3. the necessity of sustainable design in the luxury industry

3.1. Sustainable design continues to flourish

The concept of "green design" has evolved from around 1980s to the latest period of sustainable design development.^[7] With the continuous evolution of social and economic development,^[8] sustainable design continues to be popular in the luxury industry, pursuing the sustainable social order, the fairness of economic growth and the harmonious coexistence of ecological environment and people.

At present, the luxury industry takes the 6R principle as the goal of sustainable design development, including reducing resource consumption, parts reuse, material recycling, material renewable, parts reprocessing and re-design, so as to truly achieve efficient and optimized use of energy and promote sustainable development.^[9] Under the trend of sustainable development, the British luxury brand Burberry has completely eliminated the use of polyethylene materials in backpacks and retail bags. In addition, the Burberry brand plans to replace all products containing plastic ingredients with environmentally friendly and biodegradable materials by 2025.

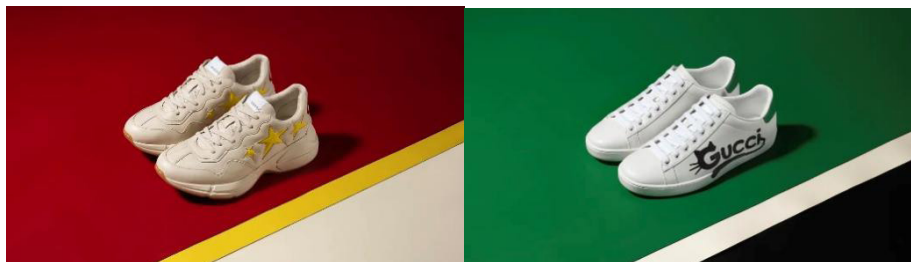


Burberry bags made with environmentally sustainable materials (photo credit: Burberry official website)

In response to the demands of sustainable design, luxury brands such as Gucci and Burberry have abandoned the use of rare animals as raw materials. ^[11]After giving up the use of fur, Gucci has won high recognition and praise from many consumers. For example, Gucci launched three sports shoes made of Demetra environmental protection materials, using plant raw materials instead of animal raw materials. “Sustainable development” has gradually become the strategy of the brand to enhance the core value of business.



GUCCI abandons the use of fur logo (photo source: GUCCI official website)



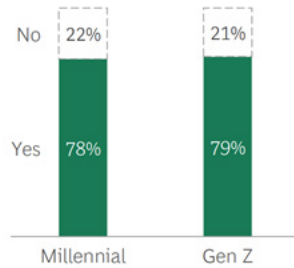
Gucci shoes made from Demetra materials (photo credit: Gucci official website)

3.2. The shift in consumption attitudes of Generation Z

According to a joint survey by BCG and Altagamma, 67 percent of Gen Z luxury consumers say that the topic of sustainability influences their luxury consumption behavior. Some 79 percent of Gen Z luxury consumers said they would stop buying if they found a luxury company using an unsustainable product.

“

If you found out a luxury company from which you usually purchase is using unsustainable practices, would you stop purchasing from them?



Source: BCG X ALTAGAMMA True-Luxury Global Consumer Insights

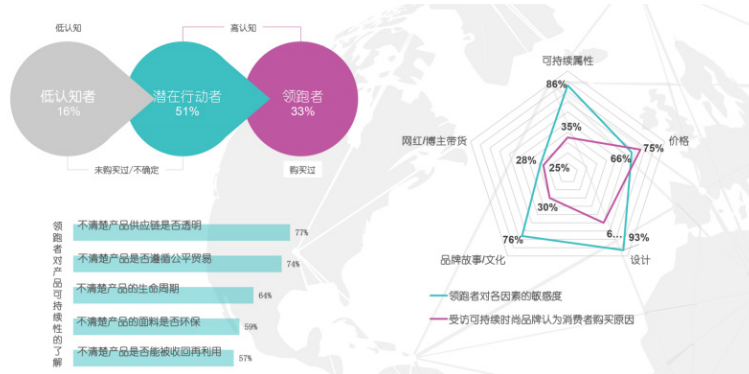
At the same time, the 2021 Consumption Insight Report on China’s second-hand Luxury e-commerce platform released by Hongblin, a second-hand luxury e-commerce platform, shows that in second-hand luxury consumption, Generation Z consumers have shifted from only buying in the past to both buying and selling, and tend to recycle luxury goods, so that many high-priced items realize resource recycling in constant circulation. In line with the concept of sustainable development advocated at present.

一件CHANEL CF的5次流转生命史图像



Data source: Hongblin

The reason Gen Z consumers buy luxury goods is no longer limited to the dimensions of luxury materials, craftsmanship and so on, R.I.S.E. Sustainable Fashion Lab conducted a sample survey of 2,251 Gen Z consumers and 20 brands this year, and found that 84% of consumers have a high awareness of environmental sustainability, of which more than 90% of the high awareness said that “the fashion industry producers should disclose the environmental impact of the production process. And be willing to learn about the fashion industry’s contribution to corporate social responsibility.”



Source: R.I.S.E. Sustainable Fashion Lab

4. A sustainable approach to luxury fashion for Gen Z

4.1. Recyclable production chain

In the era of sustainable and circular development of the global fashion industry, the luxury industry is still exploring effective ways to solve the problem of environmental pollution caused by long-term development.

In recent years, many big-name luxury designers advocate sustainable circular design^[16]. Through sustainable circular design strategy, combined with the concept of clothing life cycle, they strive to minimize resource consumption of products, so as to achieve environmental protection and form a recyclable production chain.



Data source: Circular Fashion: China's new textile economy Outlook

4.2. Biodegradable materials

The surest way to achieve sustainability in the luxury sector is to use environmentally friendly fabrics, such as recycled fabrics and plant-based leather, in textile and apparel projects. Currently, there is an over-reliance on fossil fuel-derived synthetic materials such as polyester and nylon in clothing production, which make up 65% of clothing.^[17]Not only are these garments of poor quality, they are also difficult to break down. French luxury brand Hermes is planning to launch a tote bag based on mushrooms, according to Bof.^[18]The leather-like material is made from mycelium, which is renewable, feeds on natural resources and can be simply replicated in the lab. With the exception of hardware and zippers, these eventually biodegrade.

5. Conclusion

At present, the consumer group of Generation Z is growing and expanding, and the young consumer group represented by Generation Z is rising strongly, and will have a huge impact on the entire luxury market. At the same time, combined with the concept of sustainable design, luxury brands must take social benefits and consumer demand into account when positioning product design and marketing strategies. For Generation Z, luxury consumption behavior is not only to meet their own needs, in the future, they will be more inclined to fashion personalized, green sustainable, technology virtualization.

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Impact of Modernization on the Creative and Cultural Industries

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Abstract: The article investigates the negative impact of modernization on the creative and cultural industries and identifies four significant impacts. Piracy and copy rights infringement, homogeneity of content, revenue loss, and erosion of traditional forms of art. Data is collected through analysis of various sources and recommendations such as copy right and IP rights policies, cultural education, cultural policies and support, and promotion of local content are also provided. The article concludes that modernization has a significant negative impact on the two industries and measures need to implemented to curb them.

Keywords: Modernization; The creative and cultural industries

1. Introduction

Cultural and creative industries have been reaping the perks of modernization as various artistic pieces or cultural values get connected to a wider market, provision of diverse platforms, innovation, data insights, and monetization opportunities but the main issue that is to be addressed are the negative impacts of modernization that if left unchecked would results in the deterioration of the creative and cultural industries. Standing in an era where individuals globally are more connected than ever before, the internet serves as a significant symbol of man's insatiable quest for knowledge and innovation. Transcending language, cultural and geographical barriers the internet's expansion has had a profound impact on several aspects including creative and cultural industries (Sun and Ryder 2016). The vast growth in the number of internet users necessitates industries to practice flexibility and adapt to these changes thus forcing them to utilize it to gain competitive advantage. Further influenced by factors such as Covid 19 that saw the initiation of lockdowns that spearheaded the growth of audio visual platforms such as TIKTOK and Instagram (Singh and Singh 2020). Modernization has resulted in homogenization of content, revenue challenges, limited creative autonomy, cultural appropriation, erosion of traditional art forms and privacy and copy rights infringements.

2. Piracy and Copy Rights Infringements

Consider the case of Feather v. Adobe Systems, in which a jury found the defendant Michael Feather accountable of creating and distributing 28 unauthorized copies of programs protected by Adobe Systems' copyright, to show intellectual property's hyper-compensatory remedies. By burning Adobe products onto rewritable CDs to sell on eBay, Mr. Feather violated copyrights. Despite the fact that the majority of Adobe applications only cost around \$150 at retail, the court determined that Adobe's royalty rate was \$90,000 per instance of infringement and ordered Mr. Feather to pay a \$2.52 million award (Day 2017). With the introduction of new technologies, an area where it is impossible or at the very least impractical for authors and other related rights holders to exercise their rights individually is constantly and quickly evolving, and collective management of copyright and related rights is becoming more and more important. The most effective and internationally recognized methods are now being used. The introduction of artificial intelligence has also resulted to the generation of similar art pieces, song copies and other replicas thus further worsening the situation. Piracy and copy rights infringements have been associated with economic loss, job loss, quality concerns, legal costs and erosion of cultural and artistic diversity.

However, Oganyan et al (2018) argues that although the ownership of intellectual property should encourage anticompetitive activity, it seems that those who own it prefer to promote the common good over their own interests. The holders' actions appear to be inconsistent at first glance. This section attributes increased competitiveness, inventiveness, and efficacy in markets with high quantities of IP to piracy. There are two steps to the process explanation. First off, infringement is typically only financially beneficial when a patented or copyrighted good is offered at a significantly inflated price or in an anticompetitive way as opposed to in a free market. Second, the best method for a holder to combat infringement is to lower the cost of the good or stop any anticompetitive behavior.

3. Revenue Challenges

The creative and cultural dependent industries also experience revenue loss due to modernization. Despite the growth of market globally modernization has resulted in easy access to free ‘illegal’ similar goods and services produced by the two industries thus leading to huge revenue loss. Most industries or producers do not only incur losses while battling similar looking or generic products to theirs. Revenue loss is attributed to susceptibility to piracy and copy rights infringements associated with modernization (Blackburn et al 2019). The revenue loss is experienced in form of royalties, investments, combating counterfeiting and scope of operations is also affected due to reduced profits and losses in brand value thus resulting in decreased scale of operations (Wang and Li 2021).

4. Erosion of Tradition Forms of Arts

According to Malik (2018) when compared to the qualities or cultural features of others, cultural identification is the breakdown of the traits or characteristics of a culture that is owned by a group of people and whose borders we are aware of. Therefore, to understand and even establish someone’s cultural identity, it is necessary to examine that person’s cultural identity through their modes of thought, feeling, and behavior rather than just focusing on their physical or biological traits. Modernization necessitates industries to adapt to changes and modernization has had a significant influence on changing lifestyles, shifting values, loss of certain knowledge and skills, commercialization and cultural homogenization (Maharjan 2021). Increased interactions globally between internet users has resulted in dominant global trends and popular culture that has overshadowed traditional cultural arts resulting in marginalization of traditional forms of artistic expression. The exhibition of traditional art forms for commercial purposes has also caused dilution of the authenticity of such traditional art and cultural forms. Shift in values attributed to modernization has also seen the introduction of the ‘woke’ culture where certain actions, symbols or words are considered sensitive thus resulting to reduction of artistic freedom of expression due to fear of being ‘canceled’ due to public outrage.

5. Homogenization of Content

Modernization influence on factors such as cultural exchange, media ownership, market forces, technological advancements, and globalization has resulted in homogenization of content thus resulting reduced quality of goods and services in the cultural and creative industries (Kang and Yang 2021). As globalization goes hand in hand with modernization involving the integration of cultures, societies and economies globally. The increased market access causes standardization of goods to appeal to a broader audience. The bid to produce goods and content that is universally marketable results in reduced quality while market forces may also act to favor content that appeals to broader market to boost profits. Most global creative and social digital platforms have the tendency to adapt to global norms and trends also further influencing demand and supply in creative and cultural industries (Shabir et al 2015).

6. Recommendations

Several significant measures in curbing the negative effects of modernization on cultural and creative industries include cultural policy and support, cultural education, promotion of local content and comprehensive copyright and intellectual property protection policies (Farxodjonova 2018). Cultural education should be aimed at creating awareness on the importance of preservation of traditional norms and art while policies and government support will play a crucial role in promotion of financial support and incentives for creative and cultural projects. The copyrights and IP rights policies will help curb piracy and fake products thus also curbing the negative impact of modernization.

7. Conclusion

The cultural and creative sectors have faced rough waters on the path of modernization, which is advancing at an ever-increasing rate. We run the risk of losing the profound beauty and diversity that make our planet so rich and dynamic when the tide of development threatens to undermine the delicate tapestry of our cultural heritage. Homogeneity of content, loss of revenue, erosion of traditional norms and arts, and piracy and copy right infringements have been identified as the major limitations to modernization in cultural and creative industries.

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Translation of Scientific Texts from the Perspective of Ecological Translation Theory

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Abstract: As a part of applied translation, scientific and technological translation is an important way of international scientific and technological exchange and cooperation. Based on the current domestic and foreign research on the translation of scientific and technological texts, this paper starts from the three dimensions of ecological translation theory, that is, under the principle of “multi-dimensional adaptability and adaptive selection”, explores the possibility of language, culture and communicative dimensions in the translation practice of scientific and technological texts, and finally realizes the dynamic balance between source text and target text, translator and reader.

Keywords: scientific translation; Ecological translation theory; Dynamic balance

1. Introduction

With the rapid development of science and technology and the increasing frequency of international exchanges, translation of scientific and technological texts has been paid more and more attention as an important bridge of scientific and technological exchanges and cooperation. With the continuous evolution of translation theories, ecological translation theory, as a new theoretical paradigm, provides a new perspective and thinking for the translation of scientific and technological texts. From the perspective of ecological translation theory, this paper aims to explore the practice and methods of scientific and technological style translation, and how to achieve the dynamic balance between source text and target text, translator and reader, so as to provide new ideas and inspiration for the research and practice of scientific and technological style translation.

2. Standards for Translation of Scientific and Technological Texts

According to the stylistic features, linguistic functions and linguistic environment of scientific and technological articles, the translation criteria of scientific and technological topics can be divided into three categories: faithful and accurate, smooth and fluent, and standardized and professional. Among them, the “faithful and accurate” consistency between the original text and the target text, as well as the reader’s understanding and acceptance of the “fluency” and “standard” of the target text are very important.

2.1 Faithful and Accurate

The so-called faithful and accurate means that the understanding and expression of scientific and technological content, scientific and technological terms, linguistic forms, logical relations, symbols and formulas should be accurate, and no mistranslation or omission must be made, and the semantics must be faithfully conveyed.

2.2 Smooth and Fluent

Fluency means that in order not to affect the understanding of information due to different language forms, the words and text structure of the target text should be concise, prominent and easy to understand. Translation should be smooth under the premise of “faithfulness and accuracy”. If this standard is violated, translation problems will arise.

2.3 Standardized and Professional

Scientific writing is an official writing used for communication in the field of science and technology. The higher the level of official style, the more terms, definitions and concepts, the higher the degree of specialization and professionalism of the style, and the higher the standardization and specialization requirements for translation.

3. Ecological Translation Theory

Ecological translation is a new translation theory proposed by Hu Gengshen, a famous professor in Tsinghua University. He summarizes the translation method as “three-dimensional” transformation, that is, under the principle of “multi-dimensional adaptation and adaptation selection”, it relatively focuses on the adaptation and selection transformation at the levels of language, culture, peace and communication. In the process of translation, translators can only produce suitable translation articles by adapting to the specific translation ecological environment in multiple dimensions, at least in the three dimensions (linguistic, cultural and communicative dimensions).

4. Application of Ecological Translation Theory in Scientific and Technical Translation

Translators will be influenced and restricted by the translation environment when translating scientific and technological texts, so as to make reasonable and adaptive selection of translation methods. The translation of scientific and technological texts should pay attention to the adaptive selection and conversion of language dimension, cultural dimension and communicative dimension.

4.1 Language Dimension

The translation of language dimension requires the translator to fully consider the differences between English and Chinese in the translation process, so as to make a reasonable conversion.

4.1.1 Zero translation

Some sentence elements are essential in English, but superfluous in Chinese, so they should be left untranslated in order to make the translation precise and concise.

Example 1: Any substance is made of atom. Whether it is solid, liquid or gas. (source text)

任何物质都是由原子构成的。无论是固体、液体还是气体。(target text)

Example 2: The potential of this work applied to healthcare is very great, but it could also lead to further concentration of power in the tech giants.(source text)

这一技术应用于医疗保健领域的潜力非常大，但也可能导致科技巨头权力的进一步集中。(target text)

The second type of zero translation is manifested in transliteration, that is, using Chinese characters with similar sounds to translate foreign words.

Example 3: Some people believed that clone technology is an efficient way of protecting endangered species.(source text)

有些人认为克隆技术是保护濒危物种的有效办法。(target text)

Example 4: As hacker turned up, layers of security, from antivirus programs to firewalls, were added to try to keep them at bay.(source text)

随着黑客的出现，从防病毒程序到防火墙的层层安全措施被添加进来，试图阻止他们。(target text)

From the perspective of ecological translology, some English words can be zero-translated when they appear in other languages in their original form, which is in line with the accuracy and conciseness required by the language dimension of ecological translation theory.

4.1.2 Amplification

Readers are not familiar with technical terms and professional background knowledge. In this case, additional translation can help readers better understand the original content.

Example 5: The complex automatic control system monitors over the process by means of computers.(source text)

综合自动控制系统能利用计算机监控整个操作过程。(target text)

Analysis: Add “operation” before “process” to make its specific meaning clearer.

Example 6: Sensor switches are located near the end of each feed belt.(source text)

各传感器开关位于每条给料皮带末端附近。(target text)

Analysis: Adding the word “each” before the subject noun represents multiple switches to make the translation more accurate.

The above two examples use additional translation to help readers understand the original text and achieve a reasonable transformation

of language dimensions.

4.2 Cultural Dimension

Cultural dimension transformation means that the translator should not only retain the cultural content of the source language, but also adapt to the cultural characteristics of the target language, so as to avoid misunderstandings caused by cultural differences in the translation process. Generally speaking, for cultural equivalence, literal translation can be adopted. For cultural differences, set translation can be used.

4.2.1 Literal Translation

Since scientific sources rarely have the cultural differences of literary works, it is only necessary to translate these words directly.

Example 7: DNV shall have the right to transfer, assign or subcontract all or parts of its rights and duties under this Agreement to any of its sister companies or subsidiaries.(source text)

DNV 应有权把本协议的全部或者部分权力和责任转移、转让或者分包给其任何一间姊妹公司或附属公司。(target text)

Analysis: The literal translation of the “sister companies” in the source text, whether in English or Chinese, represents the close relationship, which is the mutual communication between Chinese and Western cultures.

Example 8: Blacklisting would make it hard for American firms to function there.(source text)

被列入黑名单使得美国企业很难在那里发挥作用。(target text)

Analysis: The reason why “blacklisting” is translated as a verb is that in both Chinese and English, black can be an emotive word, which is mostly used to express bad emotions.

4.2.2 Set translation

Set translation refers to the translation of foreign words, neither phonetic nor Italian translation, but to take a compromise approach, the use of the national language already exists in the vocabulary of the application.

Example 9: Try to watch a movie with a phone with notch.(source text)

尝试用一部刘海屏手机看一部电影。(target text)

Example 10: Entry-level Samsung Galaxy F04 coming soon with 8GB RAM, teaser reveals.(source text)

预告片透露，标配版三星 Galaxy F04 (8GB) 即将推出。(target text)

The translator focuses on the cultural equivalence and differences between the source language and the target language, and transforms the words with cultural meanings in the source language into those with corresponding meanings in Chinese, thus achieving a reasonable transfer of cultural connotations.

4.3 Communicative Dimension

Scientific and technological translation is actually a kind of cross-cultural communication. It is a necessary way for beginners to master English while learning foreign advanced science and technology. It can help them understand the latest science and technology, so its communicative intention is particularly important.

4.3.1 Omission

Sparing translation and augmentation translation are corresponding translation techniques, that is, deleting words that do not conform to the thinking habits, language habits and expressions of the target language, so as to avoid the burden of questions.

Example 11: 这样一个发电站的修建费用仅占开发工程总费用的一小部分。(source text)

The cost of such a power plant accounts for only a small portion of the total of the development.(target text)

Example 12: 中国人口的 80% 生活在农村，如果不解决他们的生活问题，那社会就无法安定。(source text)

Eighty percent of China’s population live in the rural areas, and there will be no social stability unless their daily needs are met.(target text)

From the communicative dimension of ecological transliteration, if the category words in the Chinese original sentence are translated directly, the English expression will be worded. Therefore, the provincial translation is adopted to make the translation more concise and re-

alize the reasonable transformation of the communicative dimension.

5. Conclusion

Under the guidance of ecological translation theory, scientific translation is not only a simple conversion of text into another language, but also an interactive process. The translator makes appropriate selection and adaptation in three dimensions, so that the target text can adapt to the ecological environment of scientific English and readers. It can be seen that ecological translation theory provides useful ideas and methods for the translation of scientific and technological texts, and promotes the cross-cultural dissemination and understanding of scientific and technological information.

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Optimization Strategies for Process Evaluation in Primary Chinese Teaching

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Abstract: Process evaluation is a comprehensive evaluation of learning behaviors, learning attitudes, learning methods, learning cognition and other aspects of the teaching process of the elementary school curriculum, throughout the entire teaching process. The introduction of the new curriculum standards has brought developmental impetus to the reform work of elementary school Chinese curriculum teaching and learning, and at the same time, it has also put forward higher requirements for the teaching activities of elementary school Chinese curriculum. Based on this, elementary school teachers should further innovate the process evaluation model based on the new curriculum standards. Therefore, this paper combines the principles and methods of carrying out process evaluation in elementary school Chinese courses in the context of the new curriculum, innovates process evaluation, and proposes corresponding process evaluation optimization strategies.

Keywords: process evaluation; Primary education; new standard in the Chinese curriculum

Educational evaluation, as an important part of China's educational reform and development, has a profound impact on the development of China's educational endeavors. At the same time, the new standard also clearly states that "the evaluation of the Chinese curriculum includes process evaluation and summative evaluation" "The process evaluation focuses on the learning attitude, the degree of participation and the level of development of the core literacy shown by students in the process of Chinese learning."^[1] In this context, continuous innovation and improvement of process evaluation has become an urgent research topic for basic education reform.

1. Connotation of process evaluation

Process evaluation is an activity in which the teacher evaluates the effectiveness of learning and instruction during the student's learning process, based on professional evaluation criteria developed for academic quality. Process evaluation is a developmental evaluation made on the basis of observation records and reflections on the learning process of students. Teachers make timely value judgments based on students' learning performance and adjust and improve teaching by focusing on the process results of students' intellectual development in the process of teaching and learning, and promote learning through evaluation, so as to promote teachers' teaching and students' learning.

2. Problems in the evaluation of elementary school Chinese education and teaching

2.1. Narrow content of evaluation

In the traditional evaluation mechanism, the degree of memorization and reduction of textbook knowledge in the minds of primary school students is the main criterion for evaluating their excellence. Under the influence of exam-oriented education, teachers and parents over-emphasize test scores and tend to neglect the effective evaluation of students' learning methods, learning habits and learning attitudes involved in the learning process. For example, in lower elementary school Chinese teaching, some teachers only focus on the assessment of literacy and writing, while neglecting the assessment of oral communication and comprehensive practical activities.^[2] In the long run, students' values and emotional attitudes will also change, which will have a negative impact on the growth and development of primary school students.

2.2. Evaluation dysfunction

Traditional assessment in a test-based environment tends to be utilitarian, favoring test-based indicators such as performance and scores, and limiting individual development to a few cognitive abilities such as speech and thinking. This kind of utilitarian trend has led to the emergence of extreme educational ideas such as "the theory of scores only", which has misinterpreted the connotation of educational

evaluation and limited the functioning of evaluation in the Chinese curriculum. In addition to this, influenced by the reality of teacher assessment and other factors, most teachers still emphasize the screening and selection function of evaluation and ignore its developmental function. Against this background, this has led to a situation in which some schools only emphasize performance to the neglect of the all-round development of students, resulting in a situation of “teaching what is tested”.

2.3. Single subject of evaluation

The singularity of the subject of evaluation makes it difficult to bring the function and value of evaluation into play to meet the diversified needs of students' development, which will reduce students' motivation to learn and have a negative impact on their overall development. In addition, due to the lack of multi-dimensional evaluation information in the traditional evaluation structure, and the teachers' understanding of the students is limited to academic achievement and school performance, which leads to the evaluation results of elementary school students being easily affected by the one-sidedness of individual teachers' subjective factors. In the case of a single subject of teaching evaluation, it is difficult to guide and help students to obtain all-round development and evaluation.

3. Optimization Strategies for Process Evaluation in Primary Chinese Teaching

3.1. Focus on synthesis and comprehensiveness

3.1.1. Learning attitudes

A good learning attitude can effectively regulate students' learning behavior. In the process evaluation of elementary Chinese, teachers should pay attention to the evaluation of students' learning attitudes, which mainly includes three indicators of making plans, self-monitoring and self-regulation. Among them, making a plan refers to making a reasonable and feasible study plan according to the study content and study tasks, taking into account one's own situation; Self-monitoring means that students are strict with themselves in the learning process, improve their self-discipline, and are able to complete their learning program goals on time; Self-regulation means that students who encounter frustration can adjust their learning state in time through extended inquiry, communication and discussion.

3.1.2. Degree of participation

The level of participation is positively related to student development. Teachers can initiate process evaluations of students' engagement in learning based on independent and cooperative learning. In terms of self-directed learning, students with a high level of engagement are able to actively express their ideas and present their views and opinions based on active analysis of the learning material; In terms of cooperative learning, highly engaged students build positive collaborative relationships and discuss topics with teachers and peers, responding positively based on listening to others' perspectives and confusion.

3.1.3. Developmental level of core literacy

The core literacy of the Chinese curriculum consists of four aspects: cultural confidence, language use, thinking ability, and aesthetic creativity. The content of the assessment should not be limited to the classroom, but must be extended to the growth space that promotes the overall development of students. An authentic and complete record of students' performance in Chinese learning activities, oriented to their learning abilities. When testing the development level of students' core literacy, teachers should combine the learning content and students' development needs, collect key data from the classroom's key links, and reasonably use process evaluation to reflect its diversified themes and precise links. This is used as the basis for a comprehensive and authentic assessment of the quality of learning and potential of students.

3.2. Focusing on methodology for development

3.2.1. Emphasize the relevance of evaluation tools

Teachers should target the selection of assessment tools to different grade levels and different learning content. For example, lower elementary grades can document student growth through student growth portfolios by accumulating process evaluation cards of student learning; Elementary middle and upper grades can be set up through the “I am the speaker”, “class stage” and other evaluation columns exhibition of students' excellent work and positive performance, with a visual image and targeted evaluation, guiding students to experience the joy of

success, stimulate student learning Motivation.

3.2.2. *Focus on flexibility in evaluation methods*

Teachers should update their evaluation methods in a timely manner and focus on the flexibility of evaluation methods. On the one hand, the observation method plays an important role in education and teaching. Teachers can further look for and analyze what kind of teaching activities and teaching strategies students prefer by observing their performance in terms of learning bases, cognitive styles and attitudes and interests, thus helping teachers to improve their teaching methods and enhance the quality of teaching. On the other hand, the importance of verbal motivational methods in the classroom cannot be overstated. Teachers should establish a sense of integration of teaching and evaluation, and focus on the motivational and scientific nature of the evaluation language in the process of practicing process evaluation. Teachers should make full use of body language, tone of voice and motivational speech to guide students to reflect on the basis of listening carefully to students' speeches and observing students' performance, in order to maximize students' motivation and stimulate students' desire to learn, interest and thinking. In addition, in order to effectively play the advantages and functions of process evaluation, teachers can choose humorous and interesting evaluation language, breaking through the traditional stereotypical evaluation language limitations. Through the use of humor and interesting and philosophical evaluation language to create a relaxed learning atmosphere, closer to the distance between teachers and students, and promote the personalized development of students.

3.3. **Emphasizing diversity and promoting interaction**

3.3.1. *Guide students to self-assessment and mutual assessment*

Students are the subjects of the teaching and learning process, and the endogenous power of assessment comes from the students themselves. Students are motivated to learn through active assessment and develop critical thinking in the process of active assessment. In addition to this, attention is given to the mutual assessment of students, thus further complementing teacher assessment. Students in the mutual evaluation and self-assessment, the teacher, although "behind the scenes" but should be "in mind", in the evaluation process to find problems and timely guidance. Through multi-subject and multi-angle mutual assessment and self-assessment, we respect students' subjectivity, cultivate students' sense of evaluator, and lay the foundation for students' lifelong learning.

3.3.2. *Encourage parents to participate in the process of evaluation*

In the current evaluation of the main development process, teachers can encourage parents to actively participate in the evaluation, from a multi-faceted perspective on the evaluation and consideration of student development, the construction of student self-assessment, student-student mutual evaluation, teacher-student mutual evaluation and parental participation in the evaluation of the diversified evaluation system, so that three-dimensional evaluation throughout the evaluation system of primary education. It is hoped that by increasing the number of evaluation subjects, the process evaluation will be better utilized, the democratic nature of evaluation will be enhanced and the effectiveness of evaluation will be improved.

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Global Competence: Development of Concepts and Overseas Practices

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Abstract: Cultivating international talents with global competence meets the need of time. Although domestic scholars have paid much attention to the study of global competence training for Chinese students, they lack a systematic understanding of its conceptual development and its training practices. Therefore, this paper systematically overviews the development of global competence and relative programs launched by foreign universities. At the same time, it provides practical insights into the introduction of training programs and assessment frameworks in China from multiple perspectives.

Keywords: global competence; higher education

1. Introduction

In recent years, global competence has become a hot topic at the forefront. Current research mainly focuses on the global competence elements, training programs, and evaluation systems. Most of the existing studies only cover one of these areas, which is not conducive for subsequent scholars to grasp the current status and development trend of research in this field.

Therefore, this study systematically overviews the development of the concept of global competence and gathers existing training programs held by foreign schools, to present a panoramic view of the status quo of research in this field and to inspire scholars to conduct further research in this area.

2. The concept of global competence

The concept of “global competence” originates from the concept of competence. “Competence” was first formally proposed by Harvard professor David McClelland in 1973 who argues that students’ performances in examinations won’t necessarily guarantee their future success in the workplace, and that “People could foresee student’s achievement on the job merely from IQ’s tests, so he advocated replacing IQ tests with competency tests”^[1].

The concept of “global competence” was proposed by Hayden, an American scholar, “to describe the competencies necessary for individuals living in an era of globalization”^{[2][3]}. In 1988, the American Association for International Educational Exchange (AIEE) systematically put forward “global competence” in its report “Teaching for Global Competence”, arguing that global competence means that learners can understand the interconnectedness between people and the world, grasp the general facts of historical processes and international events, accept and appreciate the existence of different cultures and values, and understand the diversity^[4].

Just as the German educator Humboldt and the father of modern American education, Dewey, represented different understandings of the purpose of education in their respective cultures, American education emphasizes more on the benefits of individual competence^[5], such as personal intercultural communication skills, while Germany focuses more on social effects, emphasizing that global competence education should cover global and sustainable development.^[2] Despite the difference in emphasis, there is a consensus on the main elements of global competence, namely knowledge, skills, and attitudes. It is worth noting that some scholars^{[5][6]} have pointed out that focusing too much on the individual can lead to further social and geopolitical inequalities.

In 2017, the OECD published Global Competence for an Inclusive World, which gives a more comprehensive definition of global competence. “Global competence is the capacity to analyze global and intercultural issues critically and from multiple perspectives, to understand how differences affect perceptions, judgments, and ideas of self and others, and engage in open, appropriate, and effective interactions with others from different backgrounds on the basis of a shared respect for human dignity. “. In the next year, global competencies were considered as one of the standards in the Program for International Student Assessment (PISA) for the first time.

3. Overseas Global Competency Development Programs

Major universities around the world have launched various global competency programs. Firstly, Harvard University^[9], in addition to the Zero Point Program, has reformed its general education curriculum to develop the four core qualities of global competence: “World Knowledge and Global Issues”, “Openness and Respect”, “Self-awareness and Confidence” and “Ethics and Responsibility” in general education courses. Secondly, Texas A&M [10] launches training practices with following features. Firstly, through partnerships with universities around the world (from Denmark to the United Kingdom), exchange students can complete a full semester at a variety of interconnected institutions. While taking the steps necessary to earn the degree they want, participants can delve into the culture and history of another country. Secondly, students travel to another country for several weeks to take a required course to earn a degree. The program includes technical tours related to the major, cultural tours, small class sizes, living-learning community environments, and free time for exploration. In addition, Aalto University Finland [11] establishes an interactive platform on the web for communication, by sending virtual expos or links to registered participants. They also encourage students to move from room to room by visiting the booths, playing games or meeting fellow students in the coffee room.

The University of Sydney [12] has also held a range of programs in the area of cultural competence, primarily undertaken by the National Centre for Cultural Competence. The following is a summary of the University of Sydney’s major efforts and programs in cultural competence:

3.1. Definition and Value of Cultural Competence

The University of Sydney emphasizes the importance of cultural competence and promotes understanding and respect for different cultures. The school encourages all Australians to behave respectfully, ethically, and effectively in cross-cultural interactions through spreading Aboriginal knowledge and approaches.

3.2. Education and Training

Aimed at enhancing students’ ability to communicate and interact across cultures, the University of Sydney offers various online and face-to-face education and training options to help individuals, groups, and organizations develop their cultural competence

3.3. Innovative Teaching, Research and Participation Programs

Through innovative teaching methods, research, and engagement programs, it is committed to advancing cultural competence to tackle problems and challenges arising from a lack of cultural competence.

3.4. Partnerships

The University of Sydney establishes partnerships with a diverse range of organizations to cultivate students’ cultural competence

4. Discussion

This paper systematically reviews the literature related to the concept of global competence and the practice programs conducted abroad, reflecting the existing achievements in the field. Based on the overview, several pieces of practical suggestions for the Chinese students’ cultivation of global competence are made as follows:

4.1. Since the concept of global competence is dynamic, it is feasible to establish a global competence framework theory and practice with Chinese characteristics. China’s understanding of globalization and global competence is featured with sociality and collectivism. Concepts such as a community with a shared future for mankind put the group and society on top of the individual. Therefore, global competence with Chinese characteristics can be drawn from traditional Chinese culture to establish its model and promote it to the world, which is also a way to tell Chinese story well.

4.2. The PISA assessment framework mainly focuses on juveniles around 15 years old. Therefore, when universities try to set up their own brand, they should not only pay attention to people of different age groups, but also attach importance to the fact that the culture and

discourse system of PISA is Western-led. Chinese organizations could value the need to establish various branding programs for global competence cultivation in consideration of different target customers at different ages. If our brand goes out, more cross-cultural factors should be considered. More cross-cultural factors are supposed to be taken into consideration when promoting Chinese brand.

4.3. Chinese universities should view foreign university programs in a dialectical way. In the lecture, Dr. Cha Qiang analyzed programs of many colleges and universities, including the University of Pittsburgh, the University of South Carolina, the Washington State University, the West Virginia University, etc. After comparing their curriculums and training plans, he pointed out the shortcomings. Firstly, most of the programs are designed to develop skills and experience for employment. Secondly, they are the continuation of the original cross-cultural courses. Thirdly, even if three modes of management are set, on the whole, these systems lack systematic epistemological development. Therefore, the curriculum in Chinese universities should be articulated echoing the goal of global competency development in all courses. In addition, we should carry out more second classes, social practice, internships and so on.

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Analysis of Digital Technology Empowerment The theoretical basis of college students ' ideological and political education

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Abstract: In the context of the digital age, integrating digital technology into the ideological and political education of college students has become an important direction of ideological and political course innovation. In the university education system, the fundamental purpose of ideological and political education lies in order to deepen the understanding and identification of Marxism and its theoretical evolution in the process of Sinicization. The empowerment of digital technology enables the content to be presented in a more vivid, fascinating and persuasive way, so as to effectively promote students' understanding of Marxist theory. The empowerment of digital technology is not simply to use digital technology as a tool and use "bring doctrine" to join in the ideological and political education of college students, but to realize the empowerment of digital technology to the ideological and political education of college students according to scientific theories and using scientific ways. Clarify the theoretical basis should be the source, from the Marxist theory.

Keywords: digital technology; college students; ideological and political education; theoretical basis

Introduction

The acquisition of scientific knowledge depends on scientific methods, which are rooted in scientific thought and scientific spirit. In the process of digitization, the ideological and political teaching of college students should be consistent with the core thought of Marxism. The theoretical basis of ideological and political education for college students is discussed.

1. Science and technology thought

1.1. New science and technology innovation, new culture and new ideas

The continuous progress of science and technology is the material basis of cultural development, and it also promotes the renewal of cultural ideas to a certain extent. The development of digital technology and the deepening of its application level and scope have greatly improved the practice of human production and changed the way of human life. Due to the high application and empowerment of digital technology, the universal and special connection in practice has been enriched, the relationship between social life has been improved, the field of humanistic spirit has been widened. The development of science and technology has a profound influence on the society and culture, which has provided the necessary conditions and strength for the progress of science and technology. Digital technology has developed from the application of digital communication technology that can only carry out information transmission to the technology that can build the virtual world now. The virtual world constructed is quietly changing the production practice and life form of human beings, thus making human beings evolve into complex digital survival. The huge and profound material and spiritual value brought by digital technology has a huge impact on the human survival and development trend of the whole world.

1.2. Thinking about the technical risk

Marx and Engels believed that the history of technological development is the history of human development, and as long as there is technology, there will be technological risks. Engels's philosophy of technology is particularly remarkable, and he attaches great importance to the discussion of technology alienation. In *The Dialectics of Nature*, Engels used the methodology of dialectical materialism to deeply study the relationship between technology and man, and between technology and nature, and pointed out: "We should not be too intoxicated with the victory of our human beings against nature. For every such victory, nature will retaliate against us. Each victory, at first, achieved the result we expected, but then it had completely different and unexpected effects, often eliminating the original result." His thinking deeply re-

veals the phenomenon of technological alienation, and tries to propose solutions. On the one hand, under the condition that social production has become a wide range of machine production, machines, as the main labor force, have replaced human and animal forces, and the risks and hidden dangers brought by technology application are more inevitable, which objectively increases the outbreak probability of risks. On the other hand, due to the complexity of social practice, the relative limitation of understanding and the stage of development, people's cognitive limitations, error in technical solutions and deviation in practical application will also bring threats and damage to people's production and life.

1.3. Talents are the key factor of scientific and technological innovation, and realize self-reliance in science and technology

Self-reliance in science and technology. China must rely on its own strength to realize self-reliance in science and technology, and cannot rely on external forces. The new era needs the right idea to guide the progress, so scientific and technological innovation is crucial. Innovation-driven development has provided impetus for China's economic progress and has a profound impact on building China into a great modern socialist country. At present, China's economic development should not only transform and upgrade, but also face the pressure of foreign competition. In order to improve the economic power, we must rely on innovation. Man is the core of human exploration and change of natural and social activities."People are the most critical factor in scientific and technological innovation", General Secretary Xi Jinping has put forward many training strategies for cultivating scientific and technological talents, and is committed to "cultivating a large number of international level strategic scientific and technological talents, leading scientific and technological talents, young scientific and technological talents and high-level innovation teams."Reform the innovative talent training and use mechanism. At present, China is still in a relatively backward position in some important fields, the main reason is the lack of investment in basic research, research strength needs to be improved, and coherent research is difficult to continue. Moreover, the external international situation is not optimistic. Western countries regard China as a strong enemy in the development of key and core technology fields, and continue to suppress and contain China. General Secretary Xi Jinping believes that we should adhere to self-reliance and self-improvement in science and technology, adhere to the problem-oriented and demand-oriented approach, rely on our own capabilities to make breakthroughs, and solve problems in innovation and development. To put national prosperity and national rejuvenation on the basis of our own strength, we should research and develop cutting-edge technology, seize the first-mover advantage in the field, conquer the "bottleneck" field, and grasp the initiative of our own science and technology. Scientific and technological innovation is conducive to improving the innovative thinking and quality of workers, upgrading the labor tools, expanding the scope of labor objects, and making the social production relations more suitable for the development requirements of productive forces.

1.4. Scientific and technological progress must follow the ethics of science and technology and serve the socialist modernization drive

Scientific and technological progress must follow scientific and technological ethics and assume social responsibilities. This is because scientific and technological progress is not only related to technological breakthroughs and development, but also related to the impact on society, the environment and human beings. Therefore, while promoting scientific and technological progress, we must ensure that its development direction is in the interest of the public, respect life and health, protect the environment, and prevent the potential risks caused by the abuse of technology. The thought of science and technology emphasizes that the progress of science and technology must follow science and technology ethics and assume social responsibility. This is the moral requirement and social responsibility of the CPC in the field of science and technology. In the process of promoting scientific and technological innovation, China has always adhered to the work of scientific and technological ethics to carry out in accordance with laws and regulations, accelerated the construction of the legal system of scientific and technological ethics governance, and guided scientific and technological workers to enhance ethical awareness, enhance self-discipline ability, adhere to the bottom line of morality, so as to ensure the healthy and orderly development of scientific and technological innovation activities.

2. Comprehensive development theory

2.1. Promoting the all-round development of human material aspects

The overall progress of man covers two dimensions of material life and spiritual life. Human development is all-round, which means that people can not only meet the basic survival needs, but also be enriched and improved at the ideological and cultural level. The comprehensive development of material aspects refers to the improvement of people's material living conditions, including the development of productive forces, the increase of material wealth, and the improvement of living standards. Only under the condition of sufficient growth of the material foundation, people's basic survival needs can be met, so as to have more opportunities and ability to pursue a more advanced spiritual and cultural life. When material scarcity is no longer the main problem, people's attention and resources can turn to spiritual pursuits.

2.2. Promote the all-round development of the human spirit

People's spiritual pursuit is complex and multi-dimensional, which not only includes the exploration and appreciation of truth, morality and aesthetics, but also extends to the acquisition of new knowledge, skills and the enjoyment of artistic and cultural achievements. This all-round development requires a person to constantly seek the enrichment of the soul and the realization of the personal potential on the basis of meeting the basic physiological needs, so as to achieve a higher level of self-realization and social contribution. Culture is an important part of human spiritual life. Only when culture is fully developed can we provide spiritual support for the all-round development of human beings.

2.3. Promote the all-round development of human social relations

The overall growth of an individual depends on the support and protection of the social structure. Only in a harmonious interpersonal network can individuals maximize the use of their own potential and realize their personal value. The development of The Times not only brings rich new opportunities for people's social relations, but also objectively and inevitably makes people's social relations constantly withstand the new challenges of the development of The Times. If the enemy is underestimated or handled improperly, they will fall into new difficulties. Especially in the digital age, the establishment of "social relations" and maintain due to advanced communication technology and Internet technology support, communication becomes more convenient, communication become more diverse, but it is also likely to make people present social relations changeable, difficult, one-sided indifference, but to a certain extent, restricted the all-round development of social relations.

2.4. Promoting the all-round development of people's personality

The overall progress of individuals is regarded as the driving force and starting point for the development of society. It covers all aspects of scientific and technological innovation, economic growth and cultural prosperity. When individuals are improved in moral, intellectual and physical aspects, they can not only make better use of their own potential and realize their personal value, but also get rid of restrictions and repression, and move towards real freedom and liberation.

3. Ideological and political education theory

3.1. The development of social environment affects the transformation of ideological and political education forms

The ideological and political education theory deeply analyzes the external conditions and various functional factors that influence education. Together, these different elements shape a specific educational environment that is open in nature and free of space or time constraints, showing distinct dynamics. People in a certain period of time, people's thoughts, behaviors, attitudes and opinions, to a certain extent, are restricted by people's objective conditions. Different technologies of social life construction in different stages also create different external environments, which further specific influences restrict ideological and political education. With the continuous evolution of digital technology, new challenges to ideological and political education.

3.2. The intermediary factors affect the development of ideological and political education

The media theory of ideological and political education mainly studies the implementation methods and means of ideological and political education, that is, how to carry out effective ideological and political education through specific ways and means. From the perspective of media theory, this educational process is regarded as a multiple interaction system, involving the interaction of multiple elements. In this educational system, the educational implementer plays a key role in transmitting ideological and political ideas, while the recipient is the object to be shaped and inspired.

3.3. Leaders' important discourse on ideological and political education

Standing on the development height of The Times, it is the ideological and political education of the ideological and political education work with The Times. In inheriting the classic marxist writer of ideological and political education thought, the communist party of China leaders about ideological and political education and the Chinese excellent traditional culture on the basis of education thought, adhere to the basic principles of ideological and political education, pay attention to cultivate students 'moral quality and behavior standards, improve the students' ideological and political quality. General Secretary Xi Jinping stressed the need to promote the deep integration of the traditional advantages of ideological and political theoretical work and modern information technology. Keep up with the pace of The Times and social changes, continue to innovate the ways and strategies of ideological and political education, to ensure that ideological and political education is more in line with the requirements of The Times and has more practical results. These new discussions are not only guiding for the ideological and political education of college students, but also have important guiding significance for the inheritance and development of their ideological and political education.

Looking into the future, it is expected that digital technology can play a greater role in the ideological and political education of college students, promote the innovation of educational concepts and the improvement of educational quality. At the same time, we should always be vigilant to ensure that digital technology enables ideological and political education and does not deviate from the original aspiration and mission of education.

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The Aesthetic Experience of Chinese Calligraphy in Movies and the Audience's Emotional Response

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Abstract: Chinese calligraphy, as one of the traditional art forms in China, has been receiving increasing attention in its application in films. This article explores the aesthetic experience of calligraphy art in films and the emotional responses of the audience, discussing the artistic representation of Chinese calligraphy in films, the emotional reactions of the audience to calligraphy art in films, and its role in cultural inheritance and innovation.

Keywords: Chinese Calligraphy; Film; Aesthetic Experience; Audience Emotional Response

1. Artistic expression of Chinese calligraphy in films

1.1 Application status of Chinese calligraphy art in films

In recent years, the application of Chinese calligraphy art in movies has attracted more and more attention. More and more film directors have begun to integrate Chinese calligraphy art into the plots of films, adding unique cultural heritage and artistic charm to the films through the presentation of calligraphy works and the shaping of calligraphy artists. In many excellent films, the application of Chinese calligraphy art has become a unique cultural symbol and emotional expression, giving the films profound historical connotation and emotional resonance. The current situation of the application of Chinese calligraphy in films is rich and colorful, which has injected new vitality and vitality into the film art.

1.2 Characteristics of artistic expression of Chinese calligraphy in films

The artistic expression of Chinese calligraphy in films presents its unique characteristics, first of all, its cultural heritage and historical connotation. As a treasure of Chinese traditional culture, Chinese calligraphy contains rich historical and cultural connotations and spiritual values, which have injected profound cultural connotations into the film. Secondly, the artistic expression of Chinese calligraphy in movies has a strong aesthetic tension and emotional resonance. The artistic conception and emotion revealed between the strokes and inks of calligraphy works have been vividly reproduced in the film, and the audience can feel the charm of calligraphy art more directly through the film. Finally, the artistic expression of Chinese calligraphy in movies is characterized by the combination of tradition and modernity. It not only shows the charm and verve of traditional calligraphy, but also integrates modern aesthetic and emotional expression, forming a unique artistic expression.

2. The influence of calligraphy art on audience's emotion in movies

2.1 The emotional expression of calligraphy art in movies

In movies, the art of calligraphy is expressed in various forms and influences the audience's emotional experience through different ways of emotional expression. Firstly, through the choice and layout of calligraphic fonts, films can convey different emotional colors. Different styles of calligraphy, such as vigorous official script, smooth and smooth running script, and graceful and soft cursive script, are endowed with different emotional connotations in the film, so that the audience can have diversified emotional experience when appreciating calligraphy art. Secondly, the film presents the art of calligraphy through the lens language and picture composition, showing the artistic conception and artistic charm of calligraphy works to the audience, thus arousing the audience's emotional resonance. Moreover, movies can also enhance the emotional expression of calligraphy art through sound elements such as soundtrack and sound effect, so that the audience can be more immersed in the emotional experience when appreciating calligraphy works. To sum up, there are various ways of emotional expression

of calligraphy art in movies. Calligraphy art is presented to the audience through different audio-visual means, thus affecting the audience's emotional experience.

2.2 The influence mechanism of calligraphy art on audience's emotion

The art of calligraphy in the film affects the audience's emotions in various ways, and the influence mechanism mainly includes emotional resonance, emotional enlightenment and emotional communication. First of all, as an art form, calligraphy can arouse the audience's emotional resonance through its unique artistic charm. When the audience appreciates the art of calligraphy, they may resonate with the feelings expressed by the calligraphy works, so that the audience can have a common feeling with the calligraphy works. Secondly, the art of calligraphy can also enlighten the audience's emotional experience through its unique aesthetic implication, so that the audience can produce the sublimation and inspiration of aesthetic feelings when appreciating calligraphy works. Moreover, as a medium of emotional expression, calligraphy art can communicate with the audience through the emotional connotation expressed by calligraphy works, so that the audience can be inspired and infected emotionally. In short, the influence mechanism of calligraphy art in movies on the audience's emotions is multifaceted. Through emotional resonance, emotional enlightenment and emotional communication, calligraphy art affects the audience's emotional experience, and then produces far-reaching emotional influence.

3. The influence of calligraphy art on the audience's aesthetic feelings

The art of calligraphy in the film can stimulate the audience's aesthetic feelings through its unique aesthetic charm. As a visual art form, calligraphy can bring aesthetic pleasure and beauty to the audience through its unique elements such as lines, strokes and ink, and layout, thereby stimulating the audience's aesthetic emotions and enhancing their artistic enjoyment and aesthetic experience.

The art of calligraphy in movies can also influence the audience's emotional experience through emotional resonance. The emotion and artistic conception contained in calligraphy works can resonate with the audience and trigger the audience's inner emotional resonance, so that the audience can get a richer emotional experience and emotional expression in the process of watching the movie.

In addition, the art of calligraphy in the film can also influence the cultural identity and emotional expression of the audience through its cultural connotation. Through calligraphy works, the audience can perceive the charm and connotation of traditional Chinese culture, thus enhancing the sense of identity and cultural self-confidence of traditional culture, and producing the emotional expression and identification of traditional culture.

In general, the art of calligraphy in films is not only a form of artistic expression, but also a force that exerts a profound influence on the audience's aesthetic feelings. Through the presentation of calligraphy art, the audience can obtain multiple aesthetic emotional experiences such as aesthetic pleasure, emotional resonance and cultural identity, which enriches their psychological experience and emotional experience in the process of watching movies.

4. The expression forms of calligraphy in films

As a unique art form, Chinese calligraphy can be expressed in various forms in films. In different types of movies, the art of calligraphy has its own unique expression. In films about history, the art of calligraphy is often used to show the charm of ancient culture, showing the beauty and historical value of calligraphy art by showing the ink treasures of ancient people. In movies with modern themes, calligraphy is often used in the lives of modern people as a way to express the emotions and inner world of the protagonists. At the same time, in literary films, calligraphy art is often used to express the taste and connotation of the characters, becoming a cultural symbol and aesthetic symbol of the film. In action films, comedy films and other genres, calligraphy art also has different forms of expression, which can be the embellishment of the plot or the expression of the theme. Therefore, there are various forms of calligraphy in movies, and different types of movies will give different meanings and values to the art of calligraphy.

5. Audience's emotional response to the art of calligraphy in films

When watching calligraphy in movies, different audience groups tend to have different emotional reactions due to cultural background, personal experience and other factors. First of all, age is one of the important factors that affect the audience's emotional response. Older au-

audiences often have a deeper emotional identification with the art of calligraphy, because they may have richer historical and cultural accumulation and emotional experience. In contrast, younger audiences pay more attention to the fashion and innovative elements contained in calligraphy, resulting in a more active and trendy emotional response. Secondly, audiences from different regions also have different emotional responses to calligraphy. The audience from the birthplace of calligraphy may have a deeper emotional recognition of calligraphy art, while the audience from other places may pay more attention to the emotional impact and inspiration brought by calligraphy art in cross-cultural communication.

6. Conclusion

As one of the traditional art forms in China, Chinese calligraphy has been carrying rich cultural connotations and aesthetic values since ancient times, and its application in films has gradually attracted more and more attention. Through the study of the aesthetic experience and audience emotional response of calligraphy art in films, we have deeply explored the artistic expression of Chinese calligraphy in films and the audience's emotional response to calligraphy art in films.

Through the modern media of films, Chinese calligraphy has been able to go out of the traditional form of display and integrate into film works, presenting a more diversified and three-dimensional artistic expression for the audience, thus injecting new vitality into the inheritance and development of Chinese calligraphy. At the same time, as a form of popular culture, films also provide more opportunities for the audience to contact and understand Chinese calligraphy, promoting the spread and development of Chinese calligraphy in contemporary society.

Through the study of the expression forms of calligraphy art in films and the audience's emotional response, we not only have a clearer understanding of the artistic charm and cultural significance of Chinese calligraphy in films, but also provide new ideas and inspiration for the development of Chinese calligraphy in contemporary cultural inheritance and innovation.

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Analysis of Scientific and Technical Texts Translation Based on Communicative Translation Theory

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Abstract: In recent years, China has been developing science and technology and gradually stepping into the ranks of scientific and technological powers. While developing its own science and technology, China is also learning from the advanced scientific and technological achievements of the West, in which scientific and technological translation plays a very important role. Under the guidance of the theory of communicative translation proposed by Peter Newmark, the article analyses the characteristics of scientific and technological texts and discusses the translation methods and techniques of professional vocabulary, special sentence patterns and long and difficult sentences in scientific and technological texts, combining with the analysis of examples in the course of 'scientific and technological translation'.

Keywords: communicative translation; scientific and technical texts; translation methods

1. Introduction

Science and technology are the primary factors of productivity. Scientific and technological English is of great significance in promoting the development of our economy and society. As a carrier of scientific and technological translation, the function of scientific and technological English cannot be ignored. For a long time, there are two major problems in scientific and technological translation. The first problem is that traditional translation theory has only a certain guiding effect on scientific and technological translation. Traditional Chinese translation theories mostly focus on literary translation, and it is difficult to apply them directly to scientific and technological translation. Secondly, the readability of scientific and technical translations is poor, often accompanied by incoherence, lengthiness and ambiguity. Scientific and technical translations are less appreciated than literary translations. For information-based text, the translator should do both faithfully convey the main idea of the original text and pay attention to the reader's understanding of the acceptance of the translation, and the translation should try to make the reader get the same reception effect as the original reader as far as possible, which is the essence of Newmark's communicative translation.

2. Theory overview

Peter Newmark is a famous translator and translation theorist. 1981, the birth of a book *Approaches to Translation*, he first proposed communicative translation and semantic translation, which is a major achievement in the development of translation theory in the 1980s. The development of translation theory in the 1980s was a major achievement. Among these two translation strategies, Newmark believes that 'in communicative translation, the translator uses the target text to express the same effect as in the original language; in semantic translation, the translator expresses the true contextual meaning of the source language to the extent permitted by the syntactic structure and semantic aspects of the target text' (Newmark, 2001: 39).

Both communicative and semantic translation theories are significant contributions to Newmark's translation theory, and the focus of the two translation strategies is different. In the field of literature, translators often aim at expressing the context and style of the original text, and more often use the semantic translation theory; most of the texts in the non-literary field are informative, such as political commentaries, news, scientific and technological documents, etc., which not only need to be objective and accurate, but also need to make the readers of the target language and those of the original text have the same feeling and effect in the process of reading. Scientific and technological English is a kind of English application style adapted to the rapid development of science and technology in the world, which contains the types of scientific papers, academic works, innovative results or conference reports based on scientific research and development. Therefore, it is more appropriate to use communicative translation in the scientific and technological genre.

3. Application of Communicative Translation Theory in the Scientific and Technical Texts

3.1 Lexical level

In scientific writing, a large number of technical terms are used, and there will also be professional usage of common words. Under specific contexts, the translation of professional words will be completely different.

Example 1: Despite a severe economic downturn in a region whose growth once seemed limitless, many energy companies have too much invested in the oil sands to slow down or turn off the taps. (source text)

尽管这个曾经看似前景无限的地区经济严重下滑,但许多能源公司在油砂矿上的投资太多,以至于无法放缓或停止开采。(target text)

Analysis: This phrase “turn off the taps” is hard to judge if it’s a single phrase. Only in a specific language environment can we determine the exact meaning of words in a specific context. Based on the investments of energy companies mentioned above, then “tap” should be translated to mean extraction and development. So the translation is “停止开采.” Therefore, in the process of translation, we can not ignore the importance of context, if translated into “关掉水龙头”, it will cause the translation is not smooth, even confusing.

In scientific and technical texts, there are also a large number of syntactic words. With the rapid change of science and technology development, a large number of scientific and technological words appear in the form of borrowing, synthesis, contraction, etc.

Example 2: Syncrude oil plant (ST)

合成油炼油厂 (TT)

Analysis: Syncrude is composed of the prefix “syn”, meaning synthesis. Add the word “crude”, translated as “合成油”, and the basic meaning of “plant” is often translated as “植物”, which is widely used in scientific English, but the word has different meanings when used in combination with different words. Therefore, “Syncrude oil plant” should be translated as “合成油炼油厂”.

Example 3: Capital-intensive projects (ST)

资本密集型项目 (TT)

Analysis: “Capital-intensive” is a compound word. It is a compound adjective composed of a noun plus an adjective, meaning “资本密集的”. In fact, in scientific translation, most compound words or phrases should be translated by literal translation. Only by analyzing the semantics, accurately finding out the central word, and correctly understanding its structure, can we achieve the purpose of accurately expressing the original meaning, which is crucial for us.

3.2 Syntactic level

Passive sentences are widely used in scientific and technological translation, which in many cases will make the text more concise and clear. Since scientific writing focuses on stating facts and emphasizing objective accuracy, excessive use of the first and second person will give people an impression of subjective assumption, so the third person is often used as much as possible. The passive voice in scientific writing can better highlight the main body and focus of scientific research. Therefore, translators should take into account the differences and habits of Chinese and English language expression when translating passive sentences in scientific and technical texts, and use more flexible skills to deal with translation to achieve the purpose of communication.

Example 4: Oil sands projects are based on 40-year investment time frames. (ST)

油砂项目的投资期限为 40 年。(TT)

Analysis: This sentence cannot be translated as “油砂项目被基于 40 年的投资期限”, because this does not conform to the Chinese expression habit, so it should be translated as “油砂项目的投资期限为 40 年”, which is easier to understand. In English, technical writing usually puts the main information first, in the position of the topic. This is the main reason why passive sentences are widely used. The reason why the passive voice is used in scientific English is because it mainly describes a process, so the focus of the sentence is often not “who did it”, but “what was done” and “how did it”, which determines that the performer of the action is in the position of “unimportant”. So the passive voice is often used in scientific writing.

Another feature of scientific writing is the use of long and difficult sentences with complex structure and rigorous logic, which is also a major difficulty in scientific English translation. Most of the reasons are due to the difference in expression between Chinese and English. Chinese is a parataxis-based language, and simple sentences are often used to express the meaning of sentences. English, on the other hand, is a language based on syntaxis, and the text is often long and difficult sentences that can reflect strict logical thinking.

Example 5: The Chinese-owned company Nexen, which had its oil sands production curtailed by regulators for about a month in August because of a pipeline leak, has deferred plans to build another upgrader facility, where tar-like bitumen of the oil sands is converted into synthetic crude oil, until the end of 2020.”(ST)

今年 8 月, 中资企业尼克森公司因管道泄漏被监管机构削减了约一个月的油砂产量”。该公司已将建造另一个升级设施的计划推迟到 2020 年底, 这个升级的设施可以将油砂中的焦油状沥青转化为合成原油。(TT)

Analysis: This long sentence consists of three non-restrictive attributive clauses. If translated sequentially, it is difficult to accurately express the meaning of the original. If translated in reverse order, it is difficult to understand the original meaning. Therefore, in translation, the translator adopts the splitting method, which disrupts the original order of the sentence according to the logic of the sentence and the sequence of time, and divides the clause into independent sentences.

The translation of long sentences is a challenge in scientific English translation because they contain complex grammatical structures. Translating such sentences requires skill, but the method is not fixed. According to the communicative translation theory, the function of the original text should be preserved, the logical level should be analyzed according to the meaning group, and the appropriate translation method should be flexibly selected. The final translation should meet three requirements: (1) clear narrative logic; (2) Accurate scientific expression; (3) Fluent Chinese expression. Translators need to improve their English level, learn scientific and technological knowledge, pay attention to translation skills, sum up experience, and deepen Chinese cultivation to ensure that the translation is both faithful and standardized.

4. Conclusion

Scientific and technical texts use a large number of professional terms, special vocabulary and passive sentences to show objectivity and logical rigor, and translators need scientific and technical knowledge to accurately convey meaning and maintain the characteristics of the text. Scientific and technological translation should follow the principle of faithfulness and smoothness, and at the same time explore the artistic characteristics and retain the characteristics of the original text. Newmark believes that the selection of translation theory should consider the type of text, the audience and the purpose of translation, technical style emphasizes the transmission of objective facts, communicative translation pays attention to readers' understanding, and flexibly organizes expression to meet the needs of readers.

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A Study on the Impact of Controlling Shareholder Equity Pledge, Debt Capital Cost, and Financialization

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Abstract:In recent years, financial development has gradually detached itself from its driving role in the real economy. Some real enterprises have withdrawn from their main business and invested a lot of capital used for industrial development into high return financial industries, leading to a trend of “financial melting” in the investment structure of real enterprises. Based on the data of A-share listed companies in China’s Shanghai and Shenzhen stock markets from 2008 to 2022,a study was conducted on the relationship between controlling shareholder equity pledge and corporate financialization. It was found that the higher the proportion of controlling shareholder equity pledge,the higher the degree of corporate financialization. Mechanism testing shows that equity pledge affects the degree of corporate financialization by acting on the cost of debt capital,and the higher the analyst’s attention,the lower the significance of controlling shareholder equity pledge in corporate financialization.

Keywords:Equity pledge financialization,debt financing cost

1. Introduction

In recent years,with the development of global economic integration,China’s economy and finance have also experienced rapid growth. According to relevant data from Guotai An,in recent years,the proportion of non-financial listed companies in financial assets in China has been continuously increasing,and the reality of “shifting from real to virtual” has occurred from time to time. Although companies may increase their financial asset holdings in the short term in order to achieve excess returns,the real economy,as the cornerstone of promoting stable economic development in China,will inevitably have a negative impact on industrial investment in the long term,resulting in phenomena such as “capital flight” and “detachment from reality to illusion”,which will have adverse effects on the healthy and stable development of the economy.

Compared with traditional commercial bank loans,the prominent advantage of equity pledge is that its financing threshold and requirements are relatively low,and it is also very convenient to handle. In this process,the controlling shareholder does not transfer control of the company,and during this period,the controlling shareholder only sacrifices part of their cash flow rights as a cost. However,controlling shareholders also face risks arising from equity pledge. As the value of pledged collateral fluctuates with the stock price,once the stock price drops to the warning line or closing line,controlling shareholders who engage in equity pledge financing behavior are required to increase margin or redeem stocks in advance according to the provisions of the pledge contract. When the stock price continues to fall to the point where the pledgee can forcibly sell the stock,the controlling shareholder may lose control of the listed company due to the decrease in shareholding ratio. Therefore,in order to stabilize the stock price of the listed company,the controlling shareholder carries out preventive fund reserves. Financial assets can help companies prevent liquidity shortages that may occur in the future for a certain period of time,while also achieving profits from financial asset investments,improving the company’s profit level,masking the problem of weak physical development,and achieving the goal of short-term increase in the company’s stock price.

2. Literature review

2.1. Pledge of controlling shareholder’s equity

2.1.1. Motivation for equity pledge:

Existing research has found that the main motivations for controlling shareholders to adopt equity pledge behavior are three types: financing demand motivation,hollowing out motivation,and leverage increase motivation. Firstly,Pengetal The study in (2011) shows that

when listed companies face financing constraints, controlling shareholders will use their resource advantages to help the company. However, in situations where loan approval requirements are high and the time is long, shareholders will choose equity pledge as a more convenient method. Li Changqing et al. (2021) found through a sample of controlling shareholders pledging their own equity and lending it to pledged enterprises that major shareholders support listed companies that are bound to their own interests and are in a financing crisis, which has a long-term positive impact on the company. Secondly, Kao et al. In a study of companies in Taiwan, China (2004), it was found that the majority of shareholders pledged their equity due to their own financing issues, rather than investing in listed companies. Zheng Guojian et al. (2014) also found that in the case of equity pledge, controlling shareholders are more likely to occupy company funds, and external supervision and internal checks and balances can constrain this behavior. Cheng Fei and Zhang Qingjun (2018) found that after equity pledge, controlling shareholders increase their holdings and share risks with listed companies in order to reduce stock price fluctuations, stabilize the sentiment of small and medium-sized investors, and enhance control. In addition, Du Lizhen et al. (2019) found that major shareholders of listed companies may increase their holdings of listed company stocks by pledging funds to stabilize the company's position in order to compete for control when their shareholding ratio is low.

2.1.2. Economic consequences of equity pledge:

Based on different understandings of the motives behind equity pledge, scholars have different opinions on some phenomena and economic consequences after pledge. However, most scholars believe that the design of the equity pledge system is still not perfect, which makes the positive economic consequences after pledge far less than the negative economic consequences, and has a negative impact on the operation of the company. Zhang Taoyong and Chen Yanhua (2014) found that when pledged funds are invested in themselves or third parties, the company's performance is lower than when invested in listed companies. Wen Wen et al. (2018) also pointed out that equity pledge behavior will lower the controlling shareholder's expectations for the future development of the company, further reducing innovation investment that can enhance the company's competitiveness, and leading to an increasingly serious agency problem of the separation between control and cash flow rights. Li Changqing et al. (2021) indicate that only a small portion of controlling shareholders will support listed companies in specific circumstances, so existing literature mainly focuses on the adverse effects of equity pledge on the company. Therefore, this article studies the impact of controlling shareholder equity pledge on corporate financialization, and can also explore the motives for corporate financialization from the perspective of individual shareholder behavior.

2.2. Enterprise financialization

2.2.1. The motivation for corporate financialization:

There are two main types of motivations discussed in existing research regarding the allocation of financial assets by enterprises: one is the "reservoir" motivation, and the other is the "investment substitution" motivation. On the one hand, it is believed that the purpose of holding financial assets by enterprises is to serve as a liquidity reserve to cope with potential future funding needs, and to avoid financial difficulties caused by broken capital chains or missed investment projects due to funding shortages. Xu Gang and Zhu Weidong (2017) believe that the motivation for corporate financialization is to provide sufficient reserve funds for future business development, as financial assets can fully leverage the characteristics of cash and cash equivalents, and have strong liquidity and liquidity. Dai Zao et al. (2018) also believe that corporate financialization is motivated by preventive fund reserves, aimed at storing energy in advance for the subsequent development of enterprises. In addition, the empirical research results of Du Yong et al. (2017) demonstrate that when there is a funding gap in a company's subsequent main business, it will be resolved by reducing the proportion of financial asset holdings. On the other hand, it is believed that the essence of financialization is capital driven profit, and enterprises hold financial assets in order to obtain excess returns and achieve maximum profits. Peng Yuchao et al. (2018) found that in situations where financial assets have a greater investment advantage compared to industrial investment and the economic environment is unstable, physical enterprises will choose to hold financial assets to earn high profits. Meng Qingbin et al. (2020) also pointed out through empirical research that companies mainly allocate financial assets to obtain short-term returns, rather than to develop their main business. In summary, the motivation for "reservoir" is mainly based on providing reserves for the future business development of enterprises, while the motivation for "speculation" is based on obtaining short-term high returns.

2.2.2. *The influencing factors of corporate financialization:*

The existing research on the influencing factors of financialization of physical enterprises is mainly divided into macro and micro levels. At the macro level, it mainly involves aspects such as monetary policy, tax policy, and overall economic policy environment. At the micro level, it mainly involves aspects such as corporate profitability, corporate governance, external supervision, and executive characteristics. Macroeconomic factors such as the macroeconomic environment (Deng Chao et al., 2017) and monetary policy (Zhang Weiguo et al., 2020); Micro factors such as CEO financial background (Du Yong et al., 2019) and non controlling major shareholders (Yu Nutao et al., 2021). However, few scholars have paid attention to the recent prevalence of controlling shareholder equity pledge behavior in the capital market and its impact on corporate financialization.

3. Research Design

3.1. Theoretical analysis and assumptions

In recent years, equity pledge by controlling shareholders and the financialization of physical enterprises have become a preferred financing method for controlling shareholders due to their flexible and efficient nature, simple approval procedures, and the fact that pledging does not affect the shareholder's influence on the listed company's business operations. However, this financing method is not without drawbacks for the controlling shareholder. In the context of equity pledge, the controlling shareholder's motivation to "empty out" increases, and the risk of control transfer increases. This not only damages the value of the enterprise and triggers inefficient investment, but may also encourage the controlling shareholder to use control to allocate more financial products, leading to excessive financialization of the enterprise. Based on the above analysis, this article proposes hypothesis 1.

H1: The pledge of controlling shareholder equity is significantly positively correlated with the financialization of physical enterprises.

In order to avoid "liquidation" and transfer of control caused by delayed stock price decline due to quality issues, controlling shareholders have a strong motivation to use various means to maintain stock price stability. If the major shareholder's equity is pledged, it is more likely to occupy the resources of the listed company and manipulate accounting information. These behaviors harm the interests of listed companies and other stakeholders, increase the risk and risk of listed companies, thereby leading to an increase in capital costs and a decrease in the financial competitiveness of listed companies. Meanwhile, the cost of capital is the rate of return required by investors to correspond to their risk-taking. In order to achieve the corresponding rate of return, both industrial and financial investments can generate profits, and there is a certain degree of substitutability between the two. However, financial asset investment has advantages such as low entry barriers, low transaction costs, high reversibility, and high profit margins. Enterprises will increase their investment in financial assets with higher returns. Therefore, under the pressure of high capital costs, it will lead to an increase in the degree of financialization of enterprises. Based on this, Hypothesis 2 is proposed:

H2: The equity pledge of the controlling shareholder affects its degree of financialization by affecting the cost of debt capital.

As an important component of external supervision and governance mechanisms, securities analysts were first recognized by Jensen et al. to be able to supervise the behavior of listed companies, improve the level of target company governance, and increase company value. Moreover, many analysts have professional knowledge in accounting and finance, which can effectively identify major risks of the enterprise and suppress the behavior of controlling shareholders. Based on the research scenario presented in this article, the analyst's attention can play a moderating role in the relationship between controlling shareholder equity pledge and corporate financialization. According to reputation trading theory, accurate ratings from analysts can not only improve their own compensation, but also enhance their reputation in the industry, which has a positive impact on their career. Therefore, analysts have a strong motivation to discover the "abnormal" activities of the enterprise. Based on the above analysis, this article proposes hypothesis 3:

H3: Under certain other conditions, the higher the analyst's attention, the lower the positive correlation between controlling shareholder equity pledge and corporate financialization.

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3.2. Sample selection and data sources

This article takes Chinese A-share listed companies in the Shanghai and Shenzhen stock markets from 2008 to 2022 as research samples and conducts the following treatments: ① excluding enterprises in the real estate and financial industries; ② Exclude enterprises in ST and PT status; ③ Remove samples with missing data. On this basis, this article conducted tail reduction on all continuous variables at the 1% and 99% percentiles. The relevant data were all from the CSMAR database, resulting in 38963 observations.

3.3. Variable construction:

3.3.1. Dependent variable:

Corporate financialization (FINRATIO). This article refers to the measurement method of Du Yong et al. (2017) and uses the ratio of financial assets to total assets to define corporate financialization. The definition of financial assets in this article is different from the provisions on financial assets in the Enterprise Accounting Standards. The specific differences are as follows: ① Considering that a company's monetary funds may also be held to meet the needs of operating activities, this article does not classify them as financial assets. ② Considering that some listed companies attempt to indirectly engage in shadow banking activities through equity investments in subsidiaries, associates, or joint ventures in the financial industry, this article also includes long-term equity investments in the calculation of financial assets.

3.3.2. Explanatory variables:

Pledge of controlling shareholder's equity (PLD_DUM). This article refers to the method of Xie Deren et al. (2016) and adopts two methods to measure the equity pledge of controlling shareholders. One approach is to use the dummy variable PLD_DUM, which determines whether the controlling shareholder will use equity as collateral for financing. If there is a situation in the sample company where the controlling shareholder will use equity as collateral for financing at the end of the period, PLD_DUM will be assigned a value of 1, and if not, it will be assigned a value of 0. Another method is the proportion of equity pledge by the controlling shareholder at the end of the year (PLD_RATE), which is defined as the ratio of the number of shares used by the controlling shareholder for pledged financing to the total amount of shares held at the end of the year.

3.3.3. Mediating variables:

Cost of debt financing (Cost). Drawing on the approach of Zhou Kaitang (2017), this study examines the proportion of corporate financial expenses to total liabilities at the end of the period.

3.3.4. Adjusting variables:

Analyst attention. Drawing on the methods of Xia Fanshe and He Dexu (2021), this article uses the natural logarithm of the number of research reports released by analysts who track companies within a year plus 1 as the measurement indicator of analyst attention.

3.3.5. Control variables:

This article refers to previous literature on the influencing factors of corporate violations and sets the following control variables: enterprise size: the natural logarithm of the total assets of the enterprise; Financial leverage (Lev): Asset liability ratio, total liabilities divided by total assets; Growth rate of operating revenue: the ratio of the increase in current operating revenue to the previous operating revenue; Property Nature (SOE): Based on the judgment of the actual controller, if it is a state-owned enterprise, the value is 1, while others are 0. Fixed assets ratio (Fixed)=Net fixed assets/Total assets; Loss: If the net profit of the current year is less than 0, take 1; otherwise, take 0; Audit opinion: If the company's financial report for the year was issued with a standard audit opinion, the value is 1, otherwise it is 0.

In addition, to avoid the problem of bias in estimation results caused by the characteristics of individual industries and macroeconomic policies, this article also controls for fixed effects of industries and years.

3.4. Model design

To clarify the impact of equity pledge by controlling shareholders on corporate financialization, this article takes whether controlling shareholders pledge equity as the dependent variable and the degree of corporate financialization as the main explanatory variable. Based on panel data at the enterprise level, a fixed effects estimation model for years and industries is constructed. The following model is constructed

to test hypothesis 1:

$$FINRATIO_{i,t} = \alpha_0 + \alpha_1 PLD_DUM_{i,t} + \alpha_2 Controls_{i,t} + \sum Year + \sum Industry + \epsilon_{i,t} \quad (1)$$

To verify hypothesis 2, multiple regression models (2) and (3) were constructed on the basis of model (1). Compared with model (1), model (3) only adds the explanatory variable of debt financing cost (Cost), as follows:

$$Cost_{i,t} = \delta_0 + \delta_1 PLD_DUM_{i,t} + \delta_2 Controls_{i,t} + \sum Year + \sum Industry + \epsilon_{i,t} \quad (2)$$

$$FINRATIO_{i,t} = \beta_0 + \beta_1 PLD_DUM_{i,t} + \beta_2 Cost_{i,t} + \beta_3 Controls_{i,t} + \sum Year + \sum Industry + \epsilon_{i,t} \quad (3)$$

To verify hypothesis 3, multiple regression models (4) and (5) were constructed on the basis of model (1). Specifically, as follows:

$$FINRATIO_{i,t} = \beta_0 + \beta_1 PLD_DUM_{i,t} + \beta_2 anaattention_{i,t} + \beta_3 Controls_{i,t} + \sum Year + \sum Industry + \epsilon_{i,t} \quad (4)$$

$$FINRATIO_{i,t} = \beta_0 + \beta_1 PLD_DUM_{i,t} + \beta_2 anaattention_{i,t} + \beta_3 XMi_{i,t} + \beta_4 Controls_{i,t} + \sum Year + \sum Industry + \epsilon_{i,t} \quad (5)$$

4. Empirical analysis

4.1. Pledge of controlling shareholder's equity and corporate financialization

To test hypothesis H1, this article used a fixed effects panel data model to conduct regression analysis on the impact of controlling shareholder equity pledge on corporate financialization. The results are shown in Table 1. According to regression (1), it can be seen that there is a significant positive correlation between the pledge of controlling shareholder equity and corporate financialization at the 1% level. This result indicates that the pledge of controlling shareholder equity has a significant positive impact on corporate financialization, which means that the occurrence of pledge of controlling shareholder equity is likely to lead to an increase in the degree of corporate financialization.

Table 1 Pledge of controlling shareholder equity and corporate financialization

	(1) FINRATIO	(2) Cost	(3) FINRATIO
PLD_DUM	0.199*** (0.0311)	0.0685*** (0.00390)	0.188*** (0.0476)
Size	0.610*** (0.0155)	-0.00136** (0.000492)	0.612*** (0.0302)
Lev	-0.122 (0.0857)	0.102*** (0.00443)	-0.335* (0.166)
Growth	-0.0000336** (0.0000112)	6.10e-08*** (1.46e-08)	-0.0000330** (0.0000111)
SOE	0.377*** (0.0352)	-0.00295*** (0.000830)	0.381*** (0.0740)
FIXED	-1.649*** (0.104)	0.0685*** (0.00390)	-1.764*** (0.199)
Loss	0.115* (0.0491)	0.000706 (0.000925)	0.117* (0.0588)
Opinion	-0.353*** (0.0974)	-0.000397 (0.00218)	-0.365** (0.130)
FINRATIO		0.0434*** (0.00667)	
Cost			1.779*** (0.531)
_cons	-12.05*** (0.339)	-0.00792 (0.00976)	-12.02*** (0.650)
N	38963	38963	38963
R ²			
adj.R ²			

***p<.01, **p<.05, *p<.1

4.2. The mediating effect of debt capital cost

To examine the mediating effect of corporate debt capital cost, this article sequentially established three models, namely Model (1), Model (2), and Model (3), to study the testing methods. The regression results are shown in Table 1. The results of Model (1) in Table 1 indicate that it passes the test at a significance level of 1%, and the sign of the regression coefficient is positive, indicating a positive correlation between the pledge of controlling shareholder equity and corporate financialization.

The results of Model (2) in Table 1 show a significant correlation between controlling shareholder equity pledge and debt capital cost at a 1% level. The regression results of Model (3) in Table 1 indicate a positive correlation with corporate financialization at a 1% level of significance. Therefore, debt capital cost partially mediates the relationship between controlling shareholder equity pledge and debt capital cost. Hypothesis H2 is validated.

4.3. The moderating effect of analyst attention

Model (2) adds analyst attention to this moderating variable on the basis of Model (1). From the regression results in columns (2) and (3) of Table 1, it can be seen that the dummy variable of equity pledge and the interaction term (XM) of analyst concern are significantly negatively correlated with corporate financialization at the 1% level. The above results indicate that analyst attention plays a significant negative moderating role, which means that as analyst attention increases, the positive correlation between controlling shareholder equity pledge and corporate financialization is alleviated, verifying hypothesis H3.

Table 2 Regulatory effects of analyst focus

	(1)	(2)	(3)
	FINRATIO	FINRATIO	FINRATIO
PLD_DUM	0.199*** (0.0311)	0.184*** (0.0475)	-0.0460 (0.0321)
anaattention		-0.0212** (0.00264)	-0.00343* (0.00138)
XM			-0.0126*** (0.00290)
_cons	-12.05*** (0.339)	-13.78*** (0.696)	1.160*** (0.0174)
N	38963	38963	38963
R ²			
adj.R ²			

***p<.01, **p<.05, *p<.1

5. Conclusion and Outlook

Research has found that: ① Overall, there is a significant positive correlation between controlling shareholder equity pledge and corporate financialization. ② The equity pledge of controlling shareholders affects their degree of financialization by affecting the cost of debt capital. From an external governance perspective, the higher the analyst's attention, the weaker the positive correlation between controlling shareholder equity pledge and corporate financialization. This indicates that analyst attention has to some extent weakened the opportunistic behavior motivation of controlling shareholders and reduced the degree of corporate financialization.

Based on the above research conclusions, the following insights are provided.

Firstly, from the perspective of the government and regulatory authorities, the government should continue to strengthen the guidance of funds to flow to real enterprises, avoid the idle circulation of funds within the financial market, and guide capital market funds to better serve the development of the real economy; Strengthen the supervision of the flow of funds obtained through equity pledge, especially for state-owned enterprises.

Secondly, from the perspective of debt capital cost, reducing costs for physical enterprises can increase their industrial investment op-

opportunities and promote their return to reality, especially for private enterprises whose financialization is significantly affected by debt cost pressure.

Finally, policy measures that focus on internal and external factors such as improving the production and operation efficiency and profitability of enterprises, promoting market competition, etc. will also help alleviate the impact of capital cost pressure on the financialization of physical enterprises. A rational approach to equity pledge can effectively alleviate the financing difficulties of enterprises, but it can also increase the degree of financialization of enterprises, leading to slow industrial development and construction of physical enterprises.

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