Research on the Development of Cultural and Creative Derivatives of Oroqen Birch Bark Paper-Cutting and College Students' Entrepreneurial Practice

Yunhan Tang*

Harbin Normal University, Harbin, 150000, China
**Corresponding author: tangbaobao2026@126.com*

Abstract: *The orroqen birch bark paper cutting is a unique intangible cultural heritage (ICH) skills of the northern hunting ethnic group. It not only cuts creatures in the mountains, but also shows their reverence for nature, belief in totems, and memory of hunting life. There is promotion on ICH revitalization, the cultural and creative industry, and national policies encourage college students' entrepreneurship. Transforming birch bark paper-cutting into cultural and creative derivatives combining with college students' entrepreneurship is exploring a new way of ICH inheritance. Based on literature research method, questionnaire survey method, and case analysis method clarify the history, artistic features, and current inheritance difficulty of birch bark paper-cutting; based on the basic theories of cultural and creative development analyze consumers' awareness of it, purchase intention, category preference, and price acceptance through a market questionnaire; try to combine cultural and creative development with entrepreneurship form a college student entrepreneurial team study strategies from four directions–creative design, product series planning, brand building, and multi-channel marketing produce samples such as decorative paintings, birch bark notebooks, totem playing cards carry out an effect evaluation. Conclusion that birch bark paper-cutting cultural and creative products have market potential, college student entrepreneurial teams can realize ICH revitalization via creativity and new media operations, but they still need cooperation with ICH inheritors and local cultural tourism improve the product system and brand building achieve a win-win-win result between cultural inheritance, cultural and creative industry, and student entrepreneurship.*

Keywords: *Oroqen ethnic group; birch bark paper-cutting; intangible cultural heritage cultural and creative products; derivative development; college students' entrepreneurship*

Introduction

For generations, the Oroqen ethnic group lives in the forests of the Greater and Lesser Khingan Mountains forming their own set of ethnic culture based on hunting life, including birch bark paper cutting as one such craft. It embodies the survival wisdom, emotion and spiritual belief of this ethnic group as a carrier of its ethnic culture that is a cultural symbol of the Oroqen people themselves. Using natural birch bark as the material, the theme of birch bark paper cuttings can't separate itself from the mountain forest creatures, hunting scenes and the sun, moon, mountains and rivers, all showing this ethnic group's reverence for everything in nature; it not only has practical value but also aesthetic value.

Influenced by cultural industry policies, the cultural and creative industry has become a main method to transform traditional culture: such as museum cultural and creative projects (the Palace Museum cultural and creative products), using cultural symbols from cultural relics into modern daily necessities, which can both disseminate culture and bring in revenue, setting an example for cultural and creative transformation of ethnic intangible cultural heritage[1]. With the upgrade of residents' consumption, there are increasing demands for cultural experiences, expanding the market space for ethnic intangible cultural heritage cultural and creative products. The state constantly issues policy encouragement for college students' innovation and entrepreneurship; most universities provide innovation and entrepreneurship courses, incubate bases, creating discipline competition platform to help students carry out their cultural entrepreneurial projects[2]; It is meaningful to combine the cultural

and creative development of birch bark paper-cutting with college students' entrepreneurial practice.

1. Research Significance, Purpose, and Methods

1.1 Research Significance

Cultural inheritance: The inheritors of birch bark paper-cutting are rather old and have a very narrow social circle. Making it a cultural and creative product which is closer to our daily lives allows more people (especially young) to get acquainted with this ICH and avoid the crisis of skill discontinuity. Industrial development: ICH cultural and creative products from northern ethnic minorities often become homogenized. By using its unique materials and totem symbols, birch bark paper-cutting has the potential to fill up the category gaps on domestic ethnic cultural and creative products and really incorporate ethnic minority culture resources into the cultural and creative industry. Practice-oriented education: Through cultural and creative entrepreneurial projects, students can apply what they learned in class – like design, marketing or financial management. They can develop innovation, collaboration, and problem-solving abilities by experiencing the whole process from market research to product development and finally brand promotion.

1.2 Research Purposes and Methods

Firstly, explore the artistic value and cultural connotations of birch bark paper-cutting and turn them into cultural and creative products; Secondly, according to market research data, create cultural and creative products; Thirdly, rely on college students' entrepreneurship to verify whether ICH cultural and creative products can be implemented and provide some reference practice for the revitalization of ethnic ICH and students' cultural entrepreneurship. Our research will be conducted by the following methods: First, the literature research method is to consult relevant literature in ethnology, ICH protection, and cultural and creative industry to understand the history of development and artistic characteristics of birch bark paper-cutting, organize theories of cultural and creative development, and draw upon the experience of mature cultural and creative cases at home and abroad; Second, the questionnaire survey method is to distribute questionnaires online (Wenjuanxing) and interview offline at museums and cultural venues or cultural and creative districts to get data from consumers' awareness, purchase intention, product preference, and price acceptance towards birch bark paper-cutting cultural and creative products and determine the direction of products; Third, the case analysis method takes successful projects like Palace Museum cultural and creative products as cases to summarize experiences with cultural IP development and brand marketing and give references for birch bark paper-cutting cultural and creative products[1].

2. Overview of Oroqen Birch Bark Paper-Cutting Art

2.1 Artistic Origin and Development History

Craft of Birch bark paper-cutting is developed by the Oroqen people adapting to their hunting environment. Abundant white birch in the Greater and Lesser Khingan Mountains: birch bark is light, thin, flexible and waterproof which is easy to get and process. They were used by the Oroqen ancestors to make daily utensils such as storage boxes or clothes accessories with carving and cutting patterns on its surface for decoration; it's the prototype of birch bark paper-cutting[3].

In its initial stage, birch bark paper-cutting was mainly used practically by differentiating utensils or decorating clothing. Aesthetic awareness increased as artistic characteristics emerged later on: Hunters' experience, nature worship and mythological beliefs were included in the patterns. It was passed along orally and personally teaching it from generation to family. Changes in production methods and living environment in forest areas in modern society make the scenarios for applying birch bark paper-cutting less common; some inheritors try absorbing modern aesthetics, innovating with patterns and form of expression, finding a way to continue the inheritance.

2.2 Artistic Characteristics and Cultural Connotations

Natural white birch bark has rustic and natural textures and colors. It can be carved in thin lines or thick birch bark can be formed into three-dimensional works, etc.. Birch bark combines carving skill

and paper cutting skills -- first carve out contours, then paper-cutting cuts out details layer by layer, combining these two techniques, animal and nature patterns have a sense of dynamism. Theme: All drawings come from mountain forests and nature (deer, bears, birds and beasts, vegetation) sun, moon, mountains, rivers as the core; Modeling: Abstracts and simplifies, exaggerates and distorts, does not portray things realistically, but captures the essence of the subject which is concise and imaginative.

The Oroqen people think that mountains, rivers, the sun, the moon, birds and beasts all have their own spirit; the pattern of the sun, rivers and forest on mountains in paper cutting shows respect and expresses thanks towards the force of nature. Bears and deer are totem images of the Oroqen, and the totems in paper-cutting embodies the protective belief of the ethnic group as well as identify symbols of ethnic culture. The patterns recorded by paper-cutting reflect hunting scenes, folk rituals, wedding customs and festivals, they become visual oral historical materials of the ethnic group with reference value for studying ethnic history[4].

2.3 Current Status of Inheritance and Challenges Faced

At present, there are only a few old inheritors who inherit birch bark paper-cutting. Although cultural and tourism departments carry out protection work (ICH exhibitions, skills training courses), but the inheritance problem still exists: 1) Generation gap. Due to modern lifestyle change among young people, it takes a long time to learn this craft without making any money in the short term, so few people want to learn it. 2) Insufficient marketization. Few people know what birch bark paper-cutting is, the market demand is small, the channel for selling its works is limited, the income is meager, and the inheritors lose their motivation.3) Insufficient industrialization. Most of them are original exhibitions or single handmade souvenirs at present; No systematic cultural and creative products developed, the commercial value of cultural resources has not been realized.

3. Development and Application of Cultural and Creative Derivatives

3.1 Concept and Characteristics of Cultural and Creative Derivatives

Cultural and Creative Derivatives refer to those which use cultural elements (cultural IP/history/ethnic art) at its core, creatively redesigned so that it is a product with cultural connotation and practical function. E.g.: Palace Museum Cultural and Creative Products transform elements from cultural relics/architecture/historical stories into dolls/calendars/stationery, balancing practicality and cultural connotations[1]. Four characteristics of cultural and creative derivatives: Firstly, creative innovation, i.e., they don't just copy traditional cultural symbols, but redesigning them for adapting to modern life; Secondly, high added value, i.e., besides material cost, the value of these products also has cultural/aesthetic value; Thirdly, practicality, i.e., these products can be used in our daily life; Finally, serve as cultural carriers, i.e., we acquire cultural information while using them, thus spreading culture.

3.2 Development Process and Key Links

Whole process includes: Market research, Creative conception, Design and production, Production and sales. We do market research looking for what consumers want and what is lacking in other products to find market gaps; Creative conception finds a link between traditional culture and modern life; Design and production considers shape, function, material and craft all at one time as well as using some technology like laser engraving and modern printing; Production and sales ensures quality, setting up online and offline channels, brand marketing and promotion. Traditional patterns on birch bark paper cutting cultural and creative products can print or engrave them onto various carriers by using modern techniques which keep its traditional flavor but able to achieve mass production.

3.3 Analysis of Successful Cases

Cultural and Creative Products of Palace Museum is a standard for domestic cultural and creative development. With huge collection of cultural relics, palace architecture, and historical stories as IP resources, insisting on combining traditional culture with modern fashion; popular products like Palace Museum refrigerator magnets and calendars that transform the color and pattern on cultural relics into daily necessities; doing simultaneous marketing through exhibitions, social media communication, and cross-industry brand co-branding in order to expand its cultural influence and commercial revenue[1]. Cultural and Creative Products of Birch bark paper-cutting should learn three things from them: find

out the essence of the cultural core but not pile up symbols; balance between aesthetics and practicality; make online and offline efforts together to tell cultural stories well.

4. Market Demand Analysis of Oroqen Birch Bark Paper-Cutting Cultural and Creative Derivatives

4.1 Design and Implementation of Market Research

Various questions are designed in this questionnaire like do you know about birch bark paper-cutting? Would you purchase it? Preferences on types of products (stationery, accessories, home furnishings, toys, etc.), and an acceptable price range. The survey respondents were people from various age groups, occupation and region. Survey methods include online distribution via Wenjuanxing and offline field interviews at museums and cultural venues resulted in a variety of sample data.

4.2 Analysis of Survey Results

Survey Results: People who have never heard of Oroqen birch bark paper-cutting is 45%, people who have heard about it but do not understand it is 35%, the percentage of those who understand or are very familiar with it is just 20%, indicating a poor base of public awareness on this ICH. Purchase intentions: 65% select definitely would buy/probably would buy; the others are undecided or do not want to buy, indicating potential market demand. Category preferences: Accessories account for 35%, being the most popular; followed by stationery accounting for 25%; then comes home furnishings accounting for 20%; both toys and food packaging account for 10%. We see that consumers like light-weight cultural and creative products that they can wear and use every day. Price acceptance: Most acceptable price ranges(20 – 50), accounting for 35%; next come 50 – 100 yuan at 25% and less than 20 yuan at 20%; 100 - 200 yuan accounts for 15%, and only 5% accept prices over 200 yuan. Consumers are sensitive to price, and the market is mainly focused on low- to mid-priced affordable products.

Competitive products in the market: Ethnic Minority Cultural and Creative Products (Miao silver jewelry, Tibetan thangka cultural and creative products), Museum IP Cultural and Creative Products (Palace Museum and Shaanxi History Museum cultural and creative products). They have been matured well with high brand awareness and stable consumer groups. The advantages of birch bark paper-cutting are its unique material and pattern styles, and recognizability of northern mountain forest hunting culture making it different from most ethnic cultural and creative products on the market; shortcoming is that we start from zero for brand, limited product forms, lack of industrialization.

4.3 Summary of Market Demand and Implications

We see from our survey that there exists a market for birch bark paper cutting cultural and creative products requiring cultural popularization taking place first. Product design should reflect ethnic culture connotation, targeting practical products such as accessories, stationery or small home furnishings at prices mostly ranging from 20-100 yuan; Simplify traditional patterns based on modern aesthetic rather than copy ancient paper-cutting designs, avoid disconnecting with contemporary people's aesthetics.

5. Integration of College Student Entrepreneurial Practice Projects with the Development of Birch Bark Paper-Cutting Cultural and Creative Derivatives

5.1 Background and Objectives

In our exploration about the current situation of Oroqen ICH protection, we discovered that there was an inheritance difficulty of birch bark paper-cutting and development opportunity in cultural and creative industry, so they formed a group to do entrepreneurial practice: students majoring in art design extract patterns and design product appearance; students majoring in marketing did market research, promote new media, expand channels; students majoring in financial management handle budgeting, cost accounting, fund control. Some majors divide their labor and cooperate to carry out joint product research and development and brand operation. College students possess flexible thinking without

being bound by traditional aesthetics; they are good at modernizing ethnic patterns and suitable for creative design in cultural and creative products; they are familiar with new media (Douyin and Xiaohongshu) can create short videos and graphic-text content, capable of carrying out cultural popularization and product promotion at low cost; in addition, the state, local government and university provide support such as entrepreneurial subsidies, incubation site, and prize from entrepreneurship competition, lowering the threshold for entrepreneurship[2]. Besides, this unique hunting culture IP of birch bark paper-cutting fits perfectly with the current taste of young people for niche and original ecological ethnic aesthetics, providing a basis for development. Our ultimate goal is to realize the revitalized inheritance of birch bark paper-cutting and develop cultural and creative products with market competitiveness; achieve sustainable revenue using the money earned from cultural and creative products to support ICH inheritance in return; and train the team's capability via innovation and entrepreneurship practice.

5.2 Difficulties Faced and Solutions

Funding shortage. All of sampling, mold making and promotion need money, however we have limited funds ourselves. Countermeasures: Apply for university entrepreneurship incubation projects and participate in innovation and entrepreneurship competitions striving for prize money; applying for interest-subsidized loans for college student entrepreneurship; connecting with cultural and tourism support projects seeking small grants for cultural support.

Lack of operational experience: No practical experience for supply chain management or brand operations. Inviting university innovation and entrepreneurship mentors, ICH inheritors as project advisor; Participating in entrepreneurship training and regularly review problems in the project; Accumulate operational experiences through practice.

Difficult market expansion. The lack of fame of birch bark paper cutting, fierce competition with other cultural and creative products. Countermeasures: telling ICH stories through short videos based on cultural content to create interest; participation in ICH exhibitions and cultural and tourism markets; establish cooperation between museums and cultural and tourism scenic areas in forest regions to expand offline channels.

5.3 Creative Ideas and Design Concepts for Development

The essence of this creative idea is taking out the classic symbols of birch bark paper-cutting (deer patterns, bear totems, and patterns of mountain forest birds and beasts), retaining its line characteristic of paper-cutting for a modern minimalist reconstruction without pile up too many patterns. Following "traditional core, modern form" by consideration culture expression, aesthetics and practical function: using modern technology such as laser engraving, environmentally friendly synthetic materials or 3D printing can transfer paper-cutting patterns on different carriers that preserving the ethnic flavor at the same time enhancing the mass production capability. The abstract lines of deer patterns simplified into necklace pendants which keeps its cultural meaning yet fits well with the aesthetic of contemporary accessories.

5.4 Product Types and Brand Building

Three product series are planned:

The handmade original series: mounted birch bark paper-cutting decorative paintings and birch bark carved ornaments, retaining the original handmade craft and targeting collectors and the high-end gift market.

Daily use culture and creativity series: notebooks, bookmarks, ceramic tableware, tote bags, phone cases – they are our main affordable products that match consumer's preference according to market research.

Digital cultural and creative series (paper-cutting themed emojis, phone wallpapers, short video animations) that distribute free online, promote cultural popularization and direct traffic to physical cultural and creative products.

A niche intangible cultural heritage cultural and creative brand derived from the original ecological mountain forest culture of the northern hunting ethnic group. Logo inspired by birch bark texture and paper cutting lines; package uses environmentally-friendly materials which are printed with paper-

cutting patterns, there's unification in visual system; tells brand story well constantly, tell the history of the Oroqen ethnic group and the inheritance of birch bark paper-cutting to consumers and create emotional resonance.

5.5 Marketing Channels and Promotion Strategies

Online channels: Open a Taobao store, publish ICH craft popularization videos and real product shots on Xiaohongshu and Douyin, do influencer cooperation and livestream selling. Offline channels: Attend ICH expos and cultural and creative markets; cooperate with scenic areas of forest regions and local museums to set up dedicated counters; host regular birch bark paper-cutting experience workshops so that consumers can make something with their own hands once and deepen their cultural perception; try cross-industry brand co-branding to expand our audience circle outward.

5.6 Case Display

Birch bark paper-cutting decorative paintings. Choose original paper cutting with hunting scenes; use modern mounting technique that keeps the natural color and texture of birch bark for hanging it in your home or office as a target for gift and decorative consumer group.

Birch bark cover notebooks. The covers of birch bark with engraving of deer and plant paper cutting patterns, header and footer in the inner pages has a short popular science text on Oroqen culture for users to learn about ethnic culture while writing: it is the main stationery products.

Paper-cutting pattern tote bags. Chinese zodiac paper-cutting totems, which are printed on canvas bags with a minimalistic style targeting young consumers (easily becoming bestsellers online).

5.7 Application Effects

Sales level: The sales are relatively good in offline cultural and tourism markets and peak tourism season; it increases along with online e-commerce promotion, however, the brand's scale is small, market share is limited and there is much room for growth.

Consumer feedback: Most of them understand the unique ethnic aesthetic and cultural connotation of the products; Some say there are not enough product types, some products have too high price, need further optimization on craftsmanship, enrichment of product line as well as adjustment for more rational pricing.

Regarding cultural dissemination: Although with the sales of products, popularization in short videos and offline experience activities, more people become aware of birch bark paper-cutting, however there is still not enough depth of dissemination, we need to expand the scope of publicity so that the public can deeply know about Oroqen hunting culture.

6. Conclusion

This paper reviewed the origin, artistic features, and cultural connotation of birch bark paper-cutting; highlighted the practical difficulty of inheritance discontinuity and insufficient industrialization. Through market questionnaires, clarifying consumers' preference, price acceptance, and market competition landscape, we found that affordable daily-use cultural and creative products is the market breakthrough point. During our research, this paper verified the feasibility for college student entrepreneurial teams to participate in ICH cultural and creative development: it is feasible for cross-disciplinary college student groups to use their creative ability and new media advantage to conduct product design and brand communication but there do exist some shortcomings (such as lack of funding, shortage of supply chain, insufficient marketization) which needs to be solved proactively. The team has developed a comprehensive development strategy from creative design, product series planning, and brand building, and integrated online and offline marketing, launching products such as decorative paintings, notebooks, and tote bags and conducted effect evaluation. Proved that integrating the cultural and creative development of birch bark paper-cutting with college student entrepreneurship can achieve a three-win result of disseminating ICH, implementing cultural and creative products and cultivating students' innovation and entrepreneurship abilities.

For ICH inheritance: The entrepreneurial team cooperate with Oroqen ICH inheritors, respect their culture, co-create patterns together and protect the original craft; we ask for help from local cultural

and tourism projects and train a young group of inheritors. For entrepreneurial projects: the college student team still need to constantly optimize the supply chain, increase the range of products, and enhance the brand system; We should continuously use new media for cultural popularization to lower our marketing cost. In long term, ethnic minority ICH can absorb more force from college student entrepreneurship, let cultural and creative development be a way of living inheritance, realizing the mutual reinforcement among cultural protection, industrial income growth and innovation and entrepreneurship education, leave a model for the revitalization of northern ethnic minority ICH in China.

References

[1] Zhang Xiaobo. An Analysis of and Suggestions on the Market Positioning and Marketing Strategy of Palace Museum Cultural and Creative Products. Journal of Palace Museum Studies, 2016(01): 168–181.

[2] Ministry of Education. Opinions on Vigorously Promoting Innovation and Entrepreneurship Education in Higher Education Institutions and College Students' Independent Entrepreneurship. 2010.

[3] Yu Xuebin. Birch Bark Culture of Northern Ethnic Groups: An Integration of History, Archaeology, and Ethnology. Manchu Studies, 2006(01): 113–121.

[4] Wang Ji, Li Xiaolin. Birch Bark Paper-Cutting and Flower Pattern Sample Books. China Ethnic Groups, 2008(1): 55–57.