Cultural Ecosystem of the Seediq's Traditional Weaving Techniques—A Comparison of the Learning Differences Between Urban and Indigenous Communities

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Abstract: The Seediq tribe is one of Taiwan's Indigenous peoples, and they have very traditional weaving techniques. Women of the Seediq weave clothes and quilts for their families as they believe that only women with good weaving skill can pass through the Rainbow Bridge and be reunited with ancestors after they die. However, due to changing society, there is little demand for weaving today, and the norms observed by their ancestors are gradually disappearing, resulting in the declining number of locals capable of weaving. The weaving techniques of these Indigenous people are on the verge of disappearing. Unfortunately, when the government took measures to preserve the techniques by registering Seta Bakan as the preserver of intangible cultural heritage, and launched training classes to save such techniques, no locals were initially interested in learning weaving. After non-Seediq people were allowed to participate in learning, the course attracted weaving lovers from all over the island. The course included five learning phases within four years, which were given in urban communities. In the fourth year, the weaving teacher was invited to carry out a course to teach in her Indigenous village. Both courses have the same teacher teaching the same techniques. However, the perceptions and feelings of learning vary among members of different cultural backgrounds. UNESCO has extended the protection of intangible cultural heritage from technical objects to the maintenance and inheritance of community, thus, this study focuses on the interaction and feeling of students during the weaving courses given in two communities, analyzes how the differences of feeling and cultural background influence the learning perceptions of the students of the two communities, and examines the significance and functions of rebuilding the cultural ecosystem for the sustainable inheritance of skills. The conclusion of this study is that urban communities learn weaving purposefully because they have no cultural or technical background, while the courses for indigenous communities feature the frequent recurrence of traditional "old value". The different learning motivations, feelings, and perceptions of the two communities can be complementary and mutually supportive to each other. After exploring the cultural context, this study finds that the cultural ecosystem generated by indigenous weavers includes Gaya belief, Natural knowledge, Indigenous languages, Personal practice, Generational links, and Social interaction, which are strongly bound to each other. However, social changes can weaken or even break the cultural ecosystem; the learning courses of the two communities create opportunities for re-connection. Native tribes are the best field to build an ideal cultural ecosystem; while the urban communities play the role of an acupuncture massage stick that stimulates the ethnic consciousness and learning motivation of Indigenous peoples, which preserves and provides the techniques and external knowledge. Admittedly these two communities contribute to cultural inheritance, respectively. The analysis of this study provides an important reference for the feasible routes of carrying forward indigenous

techniques on the brink of disappearing in the current society of cultural initiative, and provides the opportunity for reconnecting cultural ecosystem through technique acquisition.

Keywords: Seediq's weaving; interest community; inheritance of traditional techniques; cultural ecosystem

1. Background

1.1. Research Motives

Taiwanese Indigenous, that live in remote mountainous areas, are culturally disadvantaged, as compared with the mainstream Han population (According to statistics, as of December 2018, Taiwan had a total population of 23 million, including 16 Indigenous peoples of 250,000). Therefore, the former is facing the problems of the rapid loss of their mother tongue and traditional techniques. Seediq women traditionally regard weaving as their duty, which not only serves the basic needs of their families, but is also for gifts, beliefs, disciplines, and honors. However, these needs and constraints have gradually disappeared due to changes in social patterns, and thus endanger the inheritance of traditional techniques. In 2015, the United Nations issued Sustainable Development Goals (SDGs) that are aimed at the problems faced by all countries and formulate 17 sustainable development goals and 169 follow-up indicators, as based on an active practice of equality and human rights [1]. Among them, culture can be said to be the heart of SDGs, and cultural heritage is also mentioned in the content, such as Target 11.4, which calls for strengthening efforts to protect and safeguard the world's cultural and natural heritage, and Target 4.7, which calls for education to promote a culture of peace and non-violence, the appreciation of cultural diversity, and culture's contribution to sustainable development, etc. [2]. However, in terms of sustainable development, Taiwan's traditional Indigenous techniques are facing difficulty in protection and safeguards.

Aware of this crisis, the government launched a campaign to protect intangible cultural heritage, and registered Seta Bakan as preserver. Like other Seediq girls, Seta Bakan began to learn weaving from her grandmother in her childhood. At first she just passed weaving tools to her grandma and helped roll threads, but as she grew up, she started to learn weaving. Smart and hard-working, Seta Bakan acquired all weaving techniques from her grandmother, who was the best weaver in the tribe. As a result, Seta Bakan was registered as the preserver of traditional Seediq weaving by the government in 2012. In order to carry forward the techniques, the government assisted Seta Bakan in launching the technique training program. However, when the course for Seediq locals began in 2014, it was difficult to attract Indigenous people to learn traditional weaving due to it being a hard, slow, and complex process. This course was later opened in urban areas where non-Seediq people were allowed to take the course, and the wide participation of people all over the island interested in weaving gave rise to the four-year training program launched in the urban community, as mentioned in this paper. Four years later, Seta Bakan was invited to the Indigenous tribe to teach the Seediq people how to weave, and this course has lasted for two years in the indigenous tribal community mentioned in this paper. Helland [3] pointed out that the inherent link between craft, community, and place is native, while "traditional" craft places greater emphasis on time and reflects the collective memory of the community, which is passed from generation to generation and marks the origin of identity. According to UNESCO's Convention for the Safeguarding of Intangible Cultural Heritage, as signed in 2003, the protection of intangible cultural heritage has shifted from the mere focus on technical objects to cultural living and community, which is the carrier of technical inheritance. Therefore, analysis of how communities influence the preservation of traditional techniques is conducive to understanding the key factors for the revival of Indigenous culture. One of the researchers in this study is an urban community trainee. On the basis of his long-term participatory observation, the researcher found that

while the same technique is taught by the same teacher, different maternal and learning environments will cause learners to show different concerns, cultural meanings, and perceptions. The learning process in the two communities features highly dynamic cultural characteristics, and its significance and contribution to the protection of cultural heritage and cultural ecosystem also arouse the interest of researchers.

1.2. Research Purpose

When people are worried about the rapid loss of traditional skills, they try to protect and conserve such cultural properties; however, this is difficult to maintain as the social life style has changed. How to adapt to the trend of the times and preserve traditional culture is an important issue. At present, UNESCO's focus on cultural heritage has shifted from material objects to living culture, namely cultural continuity. To this end, a return to community is necessary. The engagement of community members in traditional weaving learning is the practice of "small heritage" that constructs part of the collective future. Compared with the authority launching movement of cultural heritage preservation, the indigenous effort can be a small and pragmatic force that deserves great attention in cultural heritage preservation [4]. The technical performance of Taiwan's aborigines is based on the real life, beliefs, religions, social strata, and clan organizations [5]. Traditional Seediq weaving is a technique passed down from generation to generation. In this case, the technique acquisition started from non-Seediq people in metropolitan areas to tribal people in their native villages. Culture is like species characterized by dynamic evolution. Therefore, this case allows us to analyze the changing cultural ecosystem faced by traditional skills and thus seek a feasible approach to traditional technique preservation in current society. The purpose of this study is to explore the cognitive differences between urban and indigenous communities in learning the same weaving techniques, the linkage between indigenous weaving techniques and cultural ecosystem, and the potential impact of urban weaving communities on native communities.

2. Seediq Weaving

2.1. Traditional Life and Weaving of Seediq

2.1.1. Ancestral Paradigm

Seediq had been considered as a sub-group of the Atayal, however, since 2008, it has become independent and been regarded as one of the 16 Indigenous people of Taiwan. As of December 2018, its population is approximately 9771 [6], and is mainly distributed in Ren'ai Township, Nantou County.

The Pan-Atayal ethnic groups take ancestral belief as the cultural center, Gaya (Gaya, literally, means "the words of ancestors". It can be understood as the disciple, habit, laws, precept, standard of behavior, social responsibility, and moral rules [7]), and Utux (The Seediq deeply believe that the soul is immortal. When one dies, he/she will become Utux to take care of the offspring always. They practice Gaya in their rituals and behaviors and maintain a harmonious relationship with Utux-) as the cultural core. According to literature, traditional Pan-Atayal people put an emphasis on abiding by Gaya, which regulates the local ethical standards of the people and taboos of sacrifice. Anyone who abides by Gaya rules could be blessed by the ancestral spirit, otherwise they would be punished. Therefore, the Pan-Atayal people would obey Utux unconditionally and taught children to act carefully to avoid offending Utux, which granted them access to the blessings of ancestors [8–10]. In Pan-Atayal society, if a baby is a girl, her umbilical cord will be placed inside a loom as a symbol of how a woman comes into being [11]. At the age of 15, women should tattoo their faces and men should learn hunting. Women are not allowed to marry until they learn weaving and have a face tattoo [10]. Gaya defines masculine bravery as hunting, while female ability and status lie in weaving techniques [12].

2.1.2. Weaving Materials and Tools Closely Related to the Natural Environment

Traditional weaving materials and tools are natural, and because the Seediq people live in mountainous forests areas, they are endowed with rich knowledge of their surroundings. As the main material of Seediq weaving, ramie is planted in places with sufficient water and sunshine (Figure 1). Ramie has strong vitality, needs no special care, and can be planted in early spring with three to four times of harvest a year. Boiling and dyeing ramie yarn also requires auxiliary materials from plants on the mountain, such as Trema orientalis which can soften and whiten ramie thread, and dye yam and some fruits that serve as the sources of dyes. The components of weaving tools are simple, as they are mainly composed of a warp reel box and several woven parts. The tools are made by men, all parts are taken from material in forest, such as wood and bamboo. The largest and heaviest reel boxes are usually made of harder wood, such as Beech or Michelia (Figure 2).

Figure 1. Ramie.
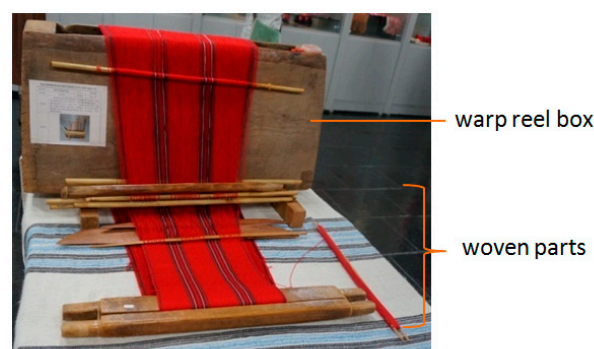
Figure 2. The weaving tools.

2.1.3. A Piece of Cloth Can Only Be Completed After Complicated Procedures

The Seediq females start the complicated procedures from ramie collection, the first step of which is to scrape ramie to separate the fibers from the epidermis (Figure 3). According to Seta Bakan's mother, this process cannot be completed quickly, and only patience with the process can improve the quality of scraping. Then they have to go through the complicated processes of exposing, finishing, twisting (Figure 4), boiling, and dyeing the yarn (Figure 5) before it can be used for weaving. Traditional Seediq men mainly dedicate themselves to hunting, while farming is the major task of women. Some hard-working Seediq women will twist threads on the way to farming fields.

Figure 3. Scraping ramie with a split bamboo tube.
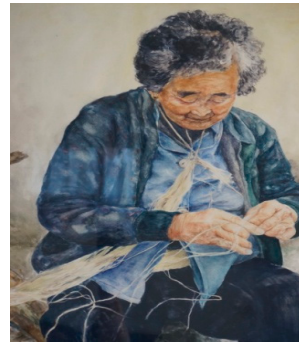
Figure 4. Twisting threads by hand (usually doing this while walking, with threads hung on the neck).

Figure 5. Boiled and dyed ramie yarn is ready for weaving.

The first step of weaving is warping which requires very close attention. To complete a piece of cloth local people have to set other chores aside and keep their children away, as even a tiny mistake can force them to disassemble and restart (Figure 6). After warping, when the yarn is removed from the warping frame, putting the yarn on the loom usually requires two people. After starting to weave, women must sit on the ground and tie warp coils to their waist with a belt. They stretch themselves like an "L" with legs straight against the loom. The waist and foot should coordinate in tune with the body motion. They press on the loom and pull the foot back alternately as they insert the yarn or pick out the weaving pattern (Figure 7).

The traditional Seediq weaving skills include plain weave, float weave, weft pick, diamond weave (Figure 8), and twill weave. Especially, Doriq Puniri (Most DoriqPuniri are red which is a color preferred by the Seediq. It contains many pattern changes. According to the clansmen, the diamond pattern is called Doriq, representing the eyes and soul of human. They protect the clansmen and request them to unite. Straight or horizontal lines represent the Rainbow Bridge to meet their ancestors. Dots and rice-shape stand for good harvest) (Figure 9), which is the most difficult skill. If one can master this skill, one can weave with all the other skills. Puniri is featured in picking warps and contains multiple floating diamond patterns. As all the patterns of Doriq Puniri are completed by picking warps, all the wefts are completely covered by floating warps. Weavers must accurately remember the pattern structure, and concentrate to patiently use the picking tools, which is unforgiving of mistakes. Doriq Puniri demonstrates excellent skills and diligence and requires good eyesight. The clansmen consider it as the top weaving skill. A senior clansman said that clothes with the Doriq Puniri were

used to make shawl for men, and only the leader of a hunting team could wear such shawls. Women used such clothes to tie their legs to show elegance. A woman who can weave Puniri is considered to be a real woman.

Figure 6. Warping.

Figure 7. Backstrap loom to weave needs to fix her body with the loom.
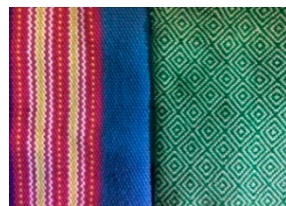
Figure 8. Plain weave, Diamond weave.
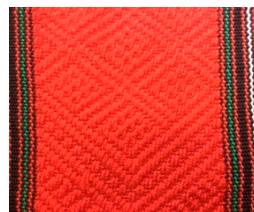
Figure 9. Doriq Puniri.

2.1.4. "Weaving"—Mission and Pilgrimage of Females

Seediq women are busy farming in the daytime, and use a backstrap loom to weave in the evening and early morning. Like Pan-Atayal women, since they were children, most Seediq women learned to weave cloth from their mothers or grandmothers. *"Atayal girls […] are obliged to observe and study the weaving tools and materials while their mothers are engaged in the weaving process […] It is not until the age of 15, when they are familiar with various weaving techniques, that girls begin to weave with looms"* [13]. For example, Seta Bakan, the instructor of the two courses, would accompany her grandmother, who was good at weaving. During her childhood, in addition to observing, she also passed her grandmothers weaving tools. She was one of the many Seediq locals who grew up to the "Tong! Tong! Tong" sound of grandma's weaving. In addition to learning from mothers and grandmothers, the local young also learn weaving from other senior family members, to whom various gifts such as glutinous rice cake and chickens, should be given for appreciation [14].

In the traditional Seediq society, which features clear division of labor, Gaya restricts men from touching the tools of weaving, just as women are not allowed to touch the hunting gear. The cloth

woven by Seediq women is not only for necessity, it is also for the dowry and gifts presented by the elders to a bride. The cloth that the bride brings with her can be given to her husband's family as the first bridge to establish interpersonal relationship.

Weaving is a family responsibility for the Seediq women, who provide their families with clothes and quilts. Good weaving and good-looking clothes will help women earn praise from others, and is a source of pride for men in the family (Figure 10). During weaving, a tiny mistake can cause the previous effort to be futile, as everything must be started again from 0, so mutual help is important and serves as testimony to the good interpersonal relationship of women good at weaving. Seta Bakan tells us that the elderly Indigenous people often says that women who do not weave well are fools with no friends.

Weaving also requires great concentration, patience and physical strength. Traditional weaving requires women tied to the loom to sit on the ground, which makes it difficult for them to move. They often sit for half a day, and must be highly patient to endure the heavy physical load, especially when they need strong arm strength and physical energy to smooth the rough self-grown ramie yarn (Seta Bakan said that her grandmother felt that she was too weak to weave, so her grandmother would urge her to eat more pork once their tribe hunted a boar). The techniques of picking up patterns require great concentration, otherwise, a tiny mistake can take weavers more time to restart. Given that the body is not free during weaving, and Seediq women have to take care of farming and household chores, it is understandable that most of them are weaving in the early morning and at night. Thus, the Seediq women practice the rules of Gaya all the time. On one hand, women of the Seediq weave due to practical needs in life, honor, and discipline of belief, on the other hand, the Seediq advocates excellent performance of individuals [15]. A woman who can weave Puniri is considered to be a real woman, and when she dies, her soul can climb the Rainbow Bridge and be reunited with ancestors [16]. The above-mentioned factors require Seediq women to spend their whole life weaving and learning the most advanced techniques (Figure 11).

Figure 10. Seediq's traditional clothes (On the right is Seta Bakan).

Figure 11. Seta Bakan's grandmother scraping ramie (about the end of the 1930s). The skill and tools of scraping have not changed so far.

2.2. Social Transformation Changes the Meaning of Weaving: From Necessity to a Cultural Product

Weaving was a demand of daily life and beliefs in the traditional Seediq society, thus Seediq weaving is a source of pride. However, since 1895 when Japan started to colonize Taiwan, civil weaving was restricted, and Indigenous people were forced to buy cloth instead of weaving it themselves. Since World War II, life has become more convenient as the demand for traditional clothing has declined, which spared women weaving cloth day and night. Although the Indigenous people no longer weave cloth for clothes and quilts, most of the 40- and 50-year-old people interviewed by the researchers recollected that they would see their elderly weave when they were young. While some of the weaving products were for tourists or collectors, it was mostly for the weavers' daughters and relatives. Some interviewees in their 50s recalled that their dowry included nearly 100 pieces of cloth, which leads us to deduce that by the 1980s weaving was still common among tribal people, but it did die down afterwards. After 1998 when the government encouraged local cultural industries, Indigenous Seediq tribes set up government subsidized studios, which aim at improving the indigenous economy. The traditional handicraft in this period gradually returned to the Indigenous mind as a "cultural symbol" [17]. Seeking economic benefits, most of the subsidized training courses symbolized by cultural revival are short-term courses taught on high looms (Figure 12) or desktop looms, and the weaving techniques tend to be simple and easy-to-learn, such as plain weaving and twill weaving [18] (Figure 13), while the traditional backstrap loom is seldom used.

Figure 12. The high looms introduced from abroad are popular in many tribes because they allow weavers to weave quickly.

Figure 13. Tribal studios will make backpacks and other goods with traditional woven cloth.

2.3. Government Involvement: Safeguarding Cultural Heritage through Learning Programs

UNESCO's Convention for the Safeguarding of Intangible Cultural Heritage, as signed in 2003 points out that intangible cultural heritage is living heritage [19], thus, its safeguarding should prioritize the "process" rather than the "result". The practice of traditional techniques, and the resulting creations, should be a community-centered cultural practice in daily life [20]. Traditional craft is part of the intangible cultural heritage protected by the Convention, and the preservation and safeguarding of techniques mark the action taken by the Convention to provide a sense of historical continuity. To this end, community is an important carrier of preservation and inheritance.

Seediq weaving is on the verge of disappearing as society develops quickly, leading the government to designate it as intangible cultural heritage in 2012 and to name Seta Bakan as a preserver. However, on the one hand, the significance of weaving to this ethnic group has changed,

and the traditional loom is characterized by difficult learning, arduous work and slow production; on the other hand, the poor livelihood of the mountainous tribes hinders the Indigenous people from learning weaving. Naturally the inheritance of techniques in a difficult environment will encounter huge obstacles. The two government-supported courses in this case are given by the Preserver Seta Bakan. This course has been taught five times within four years, and twice within two years in Indigenous tribes. (Figure 14)
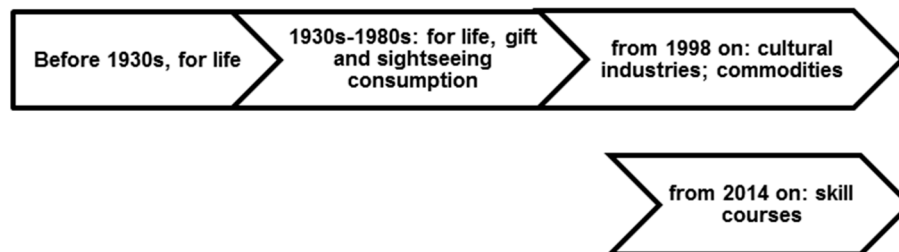
Figure 14. Development of Seediq Weaving (formulated by this study).

3. Field Sites and Subjects

3.1. Field Sites

This study selects two sites: Taichung City with a population of 2.8 million; and Nanfeng Village, Ren'ai Township, Nantou County where 1545 Seediq Indigenous people live (Figure 15) (The population data is statistical information as at November 2018, acquired from Taichung City Government and Nantou County Government on 2018/11/29). With the second largest population on the Island, Taichung City is located in the central part of Taiwan, and the entire city is connected by the high-speed railway, which allows people to travel from the south to the north within one hour. The urban community course is given in a cultural park affiliated to the Cultural Resources Bureau of the Ministry of Culture, and is a 10-min walk from the railway station, thus, the convenient transportation and large population attract the participation of urban craftsmanship communities. The site of the native tribe is located in Nanfeng Village, Nantou County, and most of the inhabitants are Seediq, and like most native tribes, the economy of Nanfeng Village is reliant on farming. The female trainees in this case usually grow vegetables and coffee in their fields to sustain their families, and make time where they can to learn weaving at the designated site.
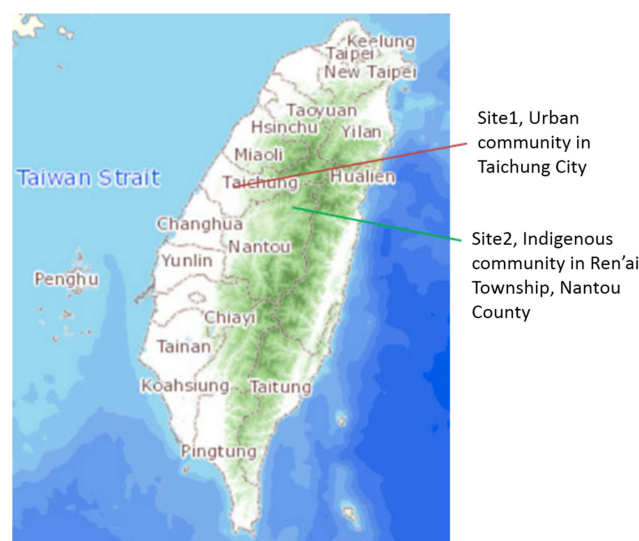
Figure 15. Field Sites (https://emap.nlsc.gov.tw/).

3.2. Research Method

The participatory observation method and interview method are adopted in this study. Regarding participatory observation, one of the researchers was a student of all courses from 2014 to 2017 in the urban community, and was engaged in the course for a long time, and thus, has deep understanding of the course; there were two phases of participatory observation in the courses for the Indigenous community from 2017 to 2018, each of which was held three times and lasted for a whole day. In-depth interviews were conducted with Instructor Seta Bakan, her mother, six urban community learners, and four indigenous community learners. The author conducted two to six informal interviews with each interviewee during the course, and one focus group, respectively, for tribal and urban communities. Each interview lasted roughly 0.5 to 1 h, and most of the interviews were held at the site. The subjects of this study are anonymous, the data are titled in a manner that protects the anonymity of the interviewees, and used as reference. For example, the urban community is referred to as [U1], [U3], while the indigenous community is referred to as [I1], [I2], [I3], etc.

3.3. Weaving Courses in Research Sites

3.3.1. Weaving Course in Urban Community

In 2012, the government inscribed Seediq weaving as cultural heritage and appointed Seta Bakan as the preserver to preserve intangible cultural heritage; however, Seta Bakan found it difficult to attract enough Seediq trainees to the class in 2014. By contrast, the seminar held for the public in the Taichung Bureau of Cultural Heritage was soon attended by the estimated number of participants, who showed huge enthusiasm for learning. Thus, the five rounds of training programs in the next four years were carried out in Taichung, and most of the trainees were non-Seediq participants who had been part of the program since it was first introduced.

This study focused on the four-year 5 courses inheritance plan from 2014 to 2017, and analyzed 10 students who continuously attended the plan. Some special handicraft enthusiasts from all over the province include one male, one Japanese and a non-Seediq Indigenous person. Most of the trainees are retired housewives and teachers in their 50s, along with a graduate student (under 30 years old). Seven of the participants are from Taichung City, and the person living farthest from Taichung is from Taipei, who spends 5 h traveling by train every day. All 10 of the students were not Seediq people. In 2017, one Seediq person came and was inspired by the course, and attends the course since this year. As this course is taught every day, some who are interested in it fail to attend it due to lack of time. Each round of class lasts for 80–100 h. The first period in the first year was for flat weaving, the second period of the first year for weft pick; the second year was for diamond-shape weaving and twill weaving, and the third and fourth years for Puniri (The government-subsidized courses for cultural heritage preservation in urban community lasted for 4 years. Some of the students gather regularly to discuss and study various weaving techniques, and not only the Seediq people participate. People of different ethnic groups even learn the technique of texture.)

In the first year, the content is plain weave, as neatening warps and weaving are the simplest processes. First, one needs to neaten the warps, and then, remove the warps from the shelf and put on the loom to start weaving. When students become familiar with weaving, they can practice color matching and changes of patterns. As the first year is simple, students are proud of the quantity of their work. In the second year, while the speed of weft picking suddenly slows, the skills are not difficult; however, this stage challenges the patience of students. Teachers try to prevent students from feeling bored and help students to turn their work into practical goods, such as bags. The contents of the third year are diamond weave and twill weave, and neatening warps at this stage becomes challenging. Students must slowly and patiently twine threads according to the rules. It takes approximately five hours to neaten a portion of thread ready to be woven, however, it is common for students to make mistakes in neatening. If one thread is wrongly twined, one needs to start all over again. Hence, it is common that students are taking out, twining, and re-neatening threads. During this course, one

student failed neatening 13 times before finally succeeding. It is a real challenge of perseverance. In the fourth and the fifth periods, students begin to learn the most difficulty skill, Doriq Puniri, which was jokingly referred to as the Big Boss. Puniri requires 25 different ways of lifting thread and replacing it layer by layer, in order to complete the circulation of four wefts. Therefore, students must weave extremely carefully and prudently. Once they make a mistake, they have to spend a long time correcting it. Different Puniri patterns have different cultural connotations, and students must learn slowly step by step. During the course of two years, the teacher was busy instructing each student. For two years, they had learned for 170 h, even so, the longest cloth woven by students was only 70 cm. When the course was completed, though students roughly understand the pattern logic, they still cannot weave independently, thus, in order to avoid mistakes, they still need their teacher to instruct them when they make each pattern.

3.3.2. Weaving Course in Indigenous Community

In 2017 the news that Seta Bakan had opened traditional weaving courses in an urban community was known by the Indigenous tribe. A community of Nantou Nanfeng Village tribe, one of the indigenous Seediq tribes, was registered as the group to preserve traditional Seediq dance. When performing traditional ceremonial dance, this group wanted to wear self-made clothes, so they invited Seta Bakan to teach weaving in the tribe. The course has lasted for two years. Most of the trainees are middle-aged and elderly women, eight of whom have never been absent within these two years. None of them knew how to weave before, but they had seen their elderly family members weave. In the first year of the course, they learned to weave plain weave and weft pick in the second year. These tribal women have to do farming and housework on weekdays, and some even help take care of their grandchildren, so the course is given in a church, in order that the locals need not spend too much time in traffic. The schedule is flexible: one period is an evening when women have spare time, and the other period lasts for a whole day. The duration of each program is 80 h divided in five weeks. Since the church is open at all time, trainees can arrange their own schedule and continue weaving even if the instructor is not available. This is why the sound of cloth being woven can be heard in early morning or late night hours (This scene seems to be closer to the habits of traditional Seediq women.). This course will continue in 2019, as it is provided near the tribe, and such convenience makes trainees willing to continue learning, students also enjoy the flexibility of the class schedule, as they can balance work and learning. When non-trainee Seediq Indigenous people walk into the site, Seta Bakan will also teach them weaving techniques in her Indigenous language (Seta Bakan said that the site in indigenous area is not so formal as that metropolitan area, and the communication in local languages makes them happy and closer.), regardless of who they are. Moreover, while they are talking, their collective memories and individual traditional weaving skills will somehow emerge, which provides an opportunity for the communication and recollection of traditional culture (Figure 16).

Figure 16. Courses in this Indigenous community are given in the tribal church, where Indigenous people, whether or not they are students, can move freely.

3.3.3. Interaction Between Urban Community and Indigenous Community

Following Seta Bakan's four-year technique course, this urban community has established a teacher–friend relationship with the instructor, and when Seta Bakan taught weaving in the tribe in 2017, one student of the urban community served as an assistant teacher. Other members of the urban community also visited the tribe several times to see their friends and impart techniques. When people of the ethnic minorities found that people not from their community knew weaving, they said, "*It's a shame! This is our skill. We didn't learn it, but you make it . . .* " (I2). Others were surprised to see male students at the urban community, as Seediq tradition does not allow males to touch the weaving tools, when an urban male student approaches the tools, the Indigenous women will feel unease. Some locals also said that, although their mothers weave well, and they expected the young to weave, they consider weaving to be complicated and thus, never start learning. Their fear of learning was not dispelled until Seta Bakan and the assistant teacher of the urban community conducted one-to-one teaching with a structured teaching method "*I am a little bit sloppy, so I did not dare to approach when my mom was weaving. Now I have teachers and teaching assistants of great patience, so I start slowly . . .* " (I3).

Comparing the learning of urban community and Indigenous community, the course sites, course duration, number of trainees, learning motivation, techniques to learn, and site features are different (Table 1).

Table 1. Urban and Indigenous community learning courses.

	Urban Community	Indigenous Community
1.Course site	Taichung City, with population of 2.8 million	Nanfeng Seediq Tribe in Ren'ai Township, Nantou County, with population of 1545
2. Course duration	2014–2017, five rounds of course within four years, 80–100 h for each round	2017–2018, two rounds of course within four years, 80 h for each round
3.Number of trainees	10	8
4.Learning motivation	Interest in crafts	Needs for dancing performance
5.Techniques to learn	Plainweave, weft pick, diamond weave, twill weave and warp pick, Puniri	Plain weave, weft pick
6.Site features	Students take courses in "formal" institutional units, so they separate the study from daily life.	When courses are given in a tribal church, trainees can balance household chores, farming and weaving.

4. Results Analysis

As society develops and traditional techniques disappear from daily life, these techniques are on the verge of disappearing completely. To prevent this some preservation movements have been launched; however, they find it difficult to be effective because of the changes of social life. How to keep traditional culture in line with the trend of the times is an arduous endeavor. Traditional indigenous Seediq weaving in Taiwan, like many other traditional techniques, faces a string of problems such as no more need for self-made clothing and gifts, the absence of Atayal norms, and the declining importance of weaving in local communities. In addition, the difficulty of traditional loom learning and heavy workload hinder rural tribal people, who dedicate themselves to farming for their livelihood, which takes away from learning weaving. Therefore, the inheritance of techniques will encounter obstacles in difficult situations. This section analyzes the case of traditional weaving in both urban and Indigenous communities, and explores the cultural significance and feelings of members who come from different backgrounds to learn at different sites, where the same instructor teaches the same technique, and observe the changes of the cultural ecosystem according to the practice of weaving.

4.1. Differences in Learning Experience between Urban and Indigenous Communities

4.1.1. Different Learning Habits: Constructive Learning and Implicit Learning

The motivation of non-indigenous urban communities for learning is mostly derived from the interest in handicraft. While they are interested in the traditional Seediq loom, which is a simple tool capable of weaving complex patterns, they do not buy the teaching method of imitating the teacher, "*What is taught is not systematic. It would be better with teaching materials . . .* " (U3), and show huge desire to grasp the sequence of techniques, decompose techniques through images and symbolic codes, and even reorganize the pattern. Such constructive learning is common in urban communities that are eager to have meaning in life.

By contrast, the motivation of the Indigenous community for learning weaving lies in the practical needs of clothing for dancing performance. While weaving is a common technique mastered by all elders of the tribe, the young generation has never learned to weave. During this course, unlike the urban community, where students obtain looms only through purchase, some trainees in Indigenous communities bring their old weaving boxes with them, and some ask their peers to make them a new one. In the learning process, from warping to weaving, they follow the instructions of the teacher without questioning her teaching methods or using the organization chart made by the teacher. That is, they are used to tacit knowledge dissemination and prefer "to be" rather than "to have". They learn what the teacher teaches in the same way that their elders learned weaving—by recollecting what kind of cloth their family has, and learning and reproducing the demonstrated techniques. For example, among these trainees there are two sisters whose mother is very good at weaving, especially the weft picking method, so they are looking forward to learning this method from their teacher. More clearly, this course follows the hands-on method, meaning they are learning knowledge through practice [21].

4.1.2. Learning Feelings: "Deliberate" Learning and the Reproduction of "Old Values"

Due to the lack of cultural memory, urban communities are mostly enthusiastic for the learning of techniques. This is a kind of "deliberate" learning, given that most of the people interested in handicraft and knitting will not confine themselves to learning this traditional weaving, and they will look for various weaving-related courses to extend their perception of tools. They feel curious about the ground loom, which is a simple tool used for weaving complex patterns. Students believe that although the high loom is faster and tidier, they enjoy more autonomous control with the ground loom. For example, the sense of coordination between the body and the loom will affect the neatness and beauty of the cloth. If students can control the tightness of the cloth and feel a sense of control with the ground loom, meaning it imposes less constraints on trainees, then trainees can also alter the pattern and texture of the same piece of cloth. This is exactly what they fail to achieve with a high loom. One of the students gives high credit to the ground loom saying, "*The ground loom is wonderful!*" (U2). For the urban community interested in handicraft, the difficult Seediq weaving skills and great autonomy of exploration attract and challenge them, and echoes with their belief that the more sophisticated the machine, "*The stupider humans will be, in that our brain will never work once we fully rely on machinery!*" (U1), just as the fixed high loom that spares humans the need to think but deprives people of autonomy and freedom. In short, the weaving of the urban community attaches more importance to the hand-made self-satisfaction.

The learning experience of Indigenous women is like the revival of "old values". For example, when warping and weaving, weavers sometimes recall the time of weaving by their elders; women who are crazy for weaving will even refuse to stop weaving and tell their husbands who urge them to go home to cook, "*I am doing what a woman should do now*" (I1), which is the natural presentation of the values that weaving is the duty of traditional women. Weavers will also talk to the box (like talking to their ancestors), and pray that they weave good cloth without committing a mistake. An Indigenous woman, whose mother-in-law knew weaving, received compliments from her sister-in-law after finishing her weaving work. Weavers wish to weave a large quantity of cloth for their children,

relatives and friends as dowry, "*I originally wanted to weave a garment for dancing performances, but now I would like to weave a lot of cloth as dowry for my kids and relatives, like what my mother and relatives did for me . . .* " (I4). The course given nearby tribes allows for the dissemination of traditional knowledge and space for communication. Local people will visit the site out of curiosity and exchange with each other their feelings and memories in indigenous languages, and males follow the tradition by staying away from the loom and not touching it. This scene is not found in the course given in the urban community.

The differences of learning feeling, including habit, significance, and awareness between urban community and Indigenous community can be sorted out as Table 2.

Table 2. Dual-community's learning feelings.

	Urban Community	**Indigenous Community**
(1) Habits of learning	Constructive learning	Tacit learning
(2) Significance of learning	Deliberate learning because of strangeness and curiosity.	Reappearance of "old values", remaining memory of the elders' weaving naturally generates cultural elements.
(3) Awareness of learning	Fond of the high autonomy and freedom of the ground loom, and the creation of new patterns; some trainees learn about amicable human-nature relationship from the ground loom.	Various connections with culture and memory, such as better proficiency to weave more cloth for children, families and friends.

4.2. Cultural Ecosystem of the Seediq Traditional Weaving Techniques

The technical presentation for Taiwanese Indigenous communities is based on a complete cultural ecosystem corresponding to life field, belief, religion, social stratum, and clan organization [5]. Lin (2012) [22] indicated that a cultural ecosystem is a complete system consisting of the efforts to survive and develop in a certain environment. This system is intertwined by many microscopic, small, medium, and large systems, the operation of which involves interaction among living things, and interaction between living things and environment. The cultural ecosystem of individuals is composed of interwoven elements including family, interpersonal networks, community, society, environment, knowledge, skills, values, beliefs, etc. Then in 2012, the government inscribed Seediq weaving as cultural heritage to safeguard traditional techniques, but the time and space in constant change lead to a cultural ecosystem different from what it was.

4.2.1. Traditional Weaving that Presents a Complete Cultural Ecosystem

The cultural ecosystem of Seediq weaving is closely related to the natural and cultural environment; the weaving materials are self-grown or extracted from mountains and forests. The ramie, the raw material of yarn, should be planted in a place with sufficient water and sunshine in early spring. Knowing how to scrape, wash and sort the raw hemp, how to determine the time of exposing hemp to sunshine to ensure quality, and which plants can supply the various colors needed for dyeing hemp are required. Answering these questions requires a wide spectrum of natural knowledge such as climate, geology, topography, sunshine, season, and dye selection. Women's memories of helping their mothers with miscellaneous work and delivering weaving tools marks the process of knowledge accumulation. During weaving, the limited freedom of the body and the skills required for constant change call for patience, concentration and physical strength. Compared with men dedicated to hunting, weaving is also an activity that requires women to use flexible strength to keep themselves physically and mentally sound, in order that they are more adaptive and responsive to the difficulties and challenges of external environments [23]. As Seta Bakan recalled, her grandmother was still busy weaving cloth and taking care of her grandchildren in her later years, which inspired her to endure

the discrimination and frustration for marrying a man of the Han ethnic group without having a boy. While weaving, women will work together in warping, and the finished products can be used as dowry or gifts to maintain social relations. Weaving and dressing display women's skills, and become a source of glory for the family of the weaver. As skilled women, their souls will eventually remain with their ancestors. All these constitute a complete cultural ecosystem, and the practice of weaving contributes to preserving local knowledge, Indigenous languages and stable social interaction.

4.2.2. Incompleteness of Indigenous Weaving Cultural Ecosystem after the Commercialization of Culture

Seediq women used to weave to meet their needs in daily life. After 1980, the practice has gradually ceased to exist because the needs in daily life have changed. Since 1998 the government has been encouraging the Indigenous peoples to develop industries with ethnic characteristics, which aim at improving the Indigenous economy. The revitalization of Seediq weaving under the banner of "cultural symbol" is materialized through subsidized training courses that were mostly short-term and seeking economic benefits. Most of these courses are taught on high looms or desktop looms, and the weaving methods taught in class tend to be simple and easy-to-learn, such as plain weaving and twill weaving. Very few techniques can be taught with traditional looms. Some ethnic groups question: "*Why do Indigenous peoples have to use traditional methods all the time?*" As society develops, the methods of technique preservation should also keep pace with the times. Only by incorporating the techniques to the trend of our times can they be carried forward [24]. Of course, Goss (1999) [25] advocated "consumption" as the main mode of "alien" cultural construction, outlining the unique significance of souvenirs in tourism for non-indigenous people [26]. If we view the transformation of indigenous crafts from the perspective of the development of human society, the commercialization of indigenous crafts can be regarded as an inevitable process for the cross-culture exchange and flow of materials in the capitalist market economy [27]. There is no doubt that the economic transformation of traditional weaving not only injects new possibilities into the aboriginal economic and cultural industry, it also enables women to build new social roles and achieve self-identity [28], as well as to become a symbolic code of communication with ethnic groups, resulting in the re-recognition of self-culture and becoming the identity and sign of ethnic groups [29].

However, when traditional techniques are transformed into economic production, the weaving process seems to focus on the visual reproduction of traditional patterns. In order to reap economic benefits, easy-to-operate high looms are naturally selected as trainees find it easier to start with it, and the weaving time is shortened to reduce fatigue. Factory-produced threads replaces the self-planted materials, as self-twisting is very complicated and slow (Figure 17). Under this circumstance, what will the cultural ecosystem of traditional weaving lose? Yulan [11] from Atayal shared her own experience of learning high weaving and ground weaving, and she became a weaver after practicing with the high loom for several months. Although she is very good at weaving, she is still concerned about her technique. Then she found out that such concern resides in the fact that learning with "*High loom is confined to technique without culture*". Hu [27] also emphasized that we should discuss and pay attention to how indigenous commodities are used as tools to carry forward indigenous cultures. Traditional Seediq weaving involves various elements such as historical memory, personal training, an understanding of the natural environment, glory and belief. The high loom is easy-to-use and easy-to-learn. The autonomy and importance of the body are reduced, while the operation of the backstrap loom lies in concentration, diligence, patience, and personal training [30]; unique and superb weaving skills can show the social status and glory of the female weaver, and the study of ethnic group can be linked with the memories and habits in the past, which is not found in high-loom production. Another example is to resort to a large number of production lines instead of using self-made materials, which cause the knowledge of environment and ethnic language to disappear. Today, the cultural revitalization of high-loom production in the form of commodities obviously fails to present and convey natural knowledge, personal cultivation, continuity of historical memory, traditional social

relationship structure, values, etc. The worst consequence of this problematic revitalization will be the disintegration of local knowledge.

Figure 17. The current Indigenous weaving uses threads mostly produced by factories in large quantities.

4.2.3. Dual-Community Courses Attempting to Bring the Traditional Cultural Ecosystem Closer

The technical presentation of Taiwanese Indigenous people is based on a complete cultural ecology corresponding to life field, belief, religion, social stratum and clan organization [5]. The social transformation has led to the migration of the indigenous population to cities [31], which inevitably changes the cultural ecosystem of weaving. Nevertheless, the approach to cultural commodities will lose many important factors in the traditional cultural ecosystem. The two communities in this case learned the technique of ground weaving, which is closer to the traditional cultural ecosystem. Instructor Seta Bakan learned weaving from her grandmother. "*I have not taught students before, so I will watch how my grandmother does it and teach those trainees as my grandma did . . .* " For the instructor, teaching is a review of culture, and learners receive traditional tacit knowledge and practice. Through the study of backstrap loom weaving, non-indigenous communities in metropolitan areas, have an opportunity to get closer to the Seediq culture. That is to say, weaving can become a platform for outsiders to understand the Seediq culture. The learning in native tribes allow trainees to stay closer to the traditional cultural ecosystem, as the use of weaving tools and techniques are the same as those used by their elders. Therefore, the interactive communication in the course can present the elements of traditional cultural ecosystem from time to time, such as the reproduction of the "division of labor between men and women, the cultural taboo that men dedicated to hunting are not allowed to touch the weaving box" and women cannot touch the hunting gear, the value of "being a woman", and the personal training that enables trainees to know how tiresome weaving was for their elders. The course also strengthens family cohesion, meaning it strengthens the sense of generation, such as the two Indigenous trainees looking forward to learning their mother's favorite weft pick, which provides family members with more common topics. "*The table cloth woven by my mother remains in the church. Now I am also a weaver, so I feel closer to my mother . . .* " (I2).

4.2.4. Analysis of Cultural Ecosystem of Two Communities and Their Linkages

Taiwanese Indigenous people speaking the Formosan languages boast cultural heritage in the basic forms of origin, historical events, spirits, and ancestors [32], which mark the substantive structure of projects of tangible and intangible cultural heritage. Indigenous people usually view cultural heritage, especially natural and cultural heritage, from a holistic perspective [33]. The primitive cultural ecosystem of Seediq weaving involves techniques and a strong linkage between the various elements, such as history and society. However, the relationship between ethnic groups and cultural ecosystem is also weakening after industrialization. This case study, meaning skills training aiming at cultural heritage preservation, hopes to restore the integrity of the cultural ecosystem by means of technique training. The following figure analyzes the relationship between the indigenous and urban communities and the cultural ecosystem, as based on traditional weaving learning. The linkage between Indigenous and urban communities of traditional weaving, as based the cultural ecosystem, is analyzed, as follows (Figure 18).
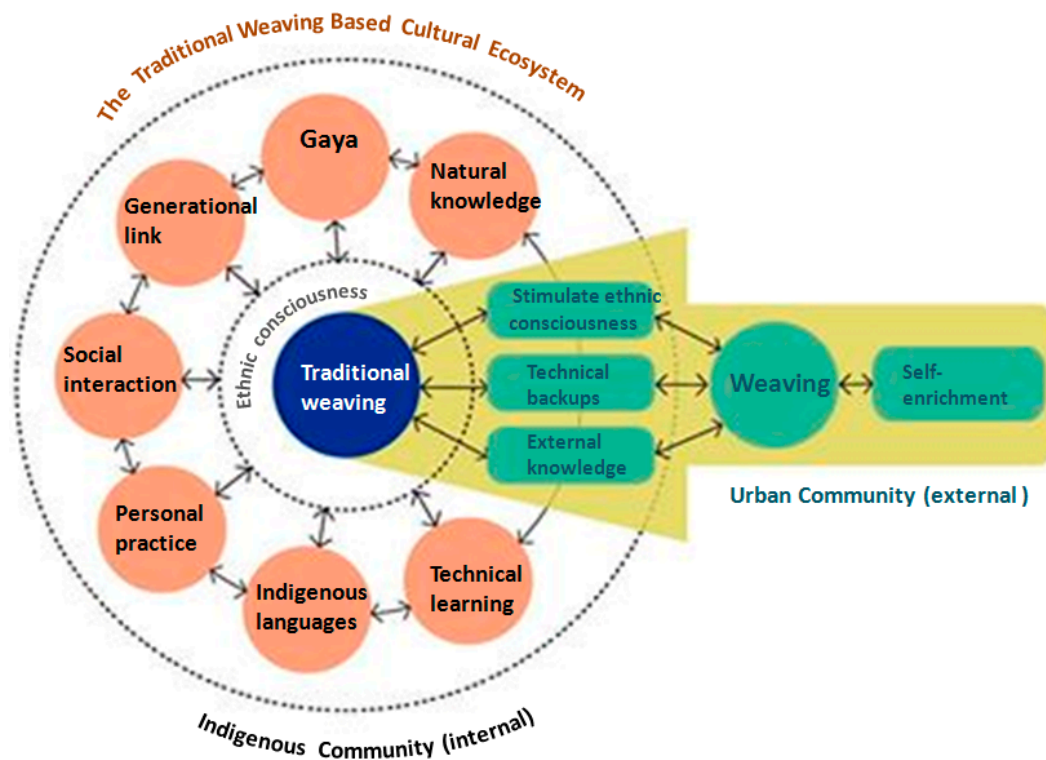
Figure 18. The linkage between Indigenous and urban communities for a traditional weaving, as based cultural ecosystem (formulated by this study).

On the left is the map of the ecosystem created by the Indigenous people through their weaving skills. Not only can learning weaving acquire techniques, but also the reproduce and strengthen the traditional cultural patterns of Gaya belief, natural knowledge, Indigenous languages, personal practice, generational link, social interaction, etc. However, when society changes, the corresponding cultural relations are different. If cultural revitalization solely hinges on the development and sale of commodities with indigenous characteristics, the cultural ecosystem linkage cannot be reproduced. In this case, the weaving courses given for the indigenous community through ground looms represent the internal force, while the motivation for learning is the creation of a performance garment, meaning a practical purpose. However, process analysis shows that a cultural ecosystem closer to tradition is capable of reconnecting the weakened and ruptured cultural ecosystem.

The right part shows the courses for urban communities, which represent the external force. While the learners were originally interested only in craft and technique perfection, the original purpose of the urban community sparked the motivation of the indigenous to learn, lest other indigenous people should refuse to learn weaving. The urban communities also encouraged the indigenous community, and became providers of external knowledge and techniques; the urban communities are like an acupuncture massage stick that stimulates the willingness to learn. In this study, for example, the indigenous were ashamed that the trainees of urban communities learned the indigenous techniques before they did, which confirms the tenacity and ambition of the Seediq people. As their ethnic consciousness is aroused, the indigenous learn harder.

5. Conclusions

Traditional Indigenous techniques are closely related to life, society, and culture. Weaving techniques are an important reference of material culture in life and an agent of cultural and social significance. Traditional Indigenous techniques are intimately related to natural environments, social interactions, and structure. If techniques disappear, not only do the skills themselves cease to exist, but also the corresponding knowledge, including the observation and perception of nature, ethnic

language, personal practice, social stability, and normative or supportive behavior will be altered. Traditional weaving does present a complete cultural ecosystem, but the social pattern has changed and cannot completely restore the traditional lifestyle. This study analyzes the cognitive differences between urban and Indigenous communities who are taught by the same instructor in learning the same skills, and uses the case study to explore the linkage between the two communities in the cultural ecosystem, which aims to outline the ideal cultural ecosystem for appropriate safeguards of cultural heritage. This study has led to the following conclusions:

5.1. Significant Differences in Weaving Learning Between Urban and Indigenous Communities

The native tribes with cultural memory are different from the urban communities without memory in their habits and perceptions of learning. The former highlights the resurrection of "old values", such as childhood memories, cultural taboos, the teachings of elders, personal training, social relations, and the values of "being a woman". Due to learning weaving, the Indigenous communities can become a carrier for cultural inheritance. The learning and honing of techniques in communities will contribute to enhancing cultural memory, which enables locals to see the value of weaving, while the course and site provides an opportunity for the "reappearance" of multiple significance. Urban communities feature "deliberate" learning motivated by interest in crafts, and local weaving is a new experience for them. This study positions the learning of urban communities as "cultural assistants". Like Western museums that help protect the cultural relics of countries in their difficult times, the case of this study also contributes to preservation. As the course with the traditional loom attracts few participants, the timely engagement of the urban community is of great significance. First, they bridge the outside world with the tribe to help the latter better carry forward tradition, helping to create vitality when it is difficult and endangered, creating opportunities for the future, leaving a backup for crafts, etc.; second, it bolsters the self-confidence of the instructor, stimulates the introspection of the clans who start to focus on their own culture and become motivated for learning. In addition, the course facilitates the learning of the tribal people through the constructive knowledge of the urban communities and the systematic teaching of techniques. The small and pragmatic synergy of two communities safeguards the "small heritage"

5.2. The Two Communities Have Their Own Functions and Roles in Rebuilding Cultural Ecosystem

In a highly dynamic cultural ecosystem, how can cultural heritage safeguards balance the traditional significance, value, and adaptability to new social patterns? Even today, the ideal Indigenous weaving cultural ecosystem still looks forward to a comprehensive linkage with the natural environment, ethnic language learning, local knowledge, social relations, and personal practice, However, if the revival is in the form of cultural commodities aiming at improving the weaving learning and economy of the Indigenous people, but merely focuses on the acquisition of techniques without considering the links with natural knowledge and social relations, the inheritance is confined to technique learning only. Admittedly, while ethnic consciousness has been aroused, its link with the cultural ecosystem is weak and even ruptures.

In this study, the starting point of the weaving cultural ecosystem is different from the urban or Indigenous communities. Like other tribes, the Indigenous tribe is suffering from the weakening linkage of cultural ecosystem. Seta Bakan's courses bring the opportunity of cultural ecosystem reconnection and enables locals to connect to the original cultural ecosystem in the process of learning: For example, local people will recall memories from their childhood, sparking the desire to weave more cloth for their children just like their mothers who wove a large amount of cloth for the dowries of the young generation. This is a kind of historical continuity that enhances the sense of connection between generations. The study of urban communities does not concern the Indigenous cultural ecosystem, thus, it is necessary for instructors to indirectly impart knowledge on weaving and the Indigenous ecosystem, such as explaining the use of weaving techniques in ethnic groups, the significance of different patterns to an ethnic group, and the social status of women in tribes who are good at weaving.

In other words, urban communities understand Indigenous culture through weaving techniques. When members of urban communities enter the Indigenous tribes and interact with the local ethnic groups, they create opportunities for strengthening the connection between urban communities and the Indigenous cultural ecosystem.

Therefore, this study concludes that both urban and indigenous communities have their own functions and roles in rebuilding a cultural ecosystem. The Indigenous tribes are the best site to construct an ideal cultural ecosystem, while the urban communities are like an acupuncture massage stick that stimulates ethnic awareness and learning motivation, which preserves and provides techniques and external knowledge.

The traditional weaving culture ecosystem features the strong connection between weaving techniques and all elements, but such connection is weakened and even ruptured in the face of the extinction of techniques. The curriculum of the two communities in this study revitalizes the weaving cultural ecosystem of weaving, that is to say, to reconnect the weakened or even ruptured ecosystem, and to allow people, to some extent, to reinterpret the meaning of links for cultural revival.

Culture and society will never be static. Today the social situation makes it difficult to reproduce the previous scenario where every single Seediq knew weaving. Using new possibilities to create different needs and to attract weaving fans to learn opens the door for traditional techniques to be discovered and learned. For example, in this case, urban residents interested in crafts will be called on to take weaving courses, in order that the predicament that no Indigenous people would like to learn weaving can be alleviated. In the course of learning and interaction between the two communities, it is found that the different learning feelings and perceptions of these two can produce complementary and mutually supportive effects, and contribute to the inheritance of traditional techniques and the cultural ecosystem linkage, which is deemed by the author as an appropriate channel of cultural inheritance that fits in the current social pattern. The contribution of the government consists of protective measures. While traditional weaving is scantly needed in daily life, the government supports the learning program without confining it to the Indigenous people. When the Seediq tribe learned that non-Indigenous people had been learning weaving for years, their ethnic awareness was stimulated, and they became motivated to learn and think about their own culture. Only then will the government continue to support the learning courses for Indigenous communities. It is an opportunity for cultural ecosystem reconnection.

The number of tribal participants in the course of this case is still largely outnumbered by the number of traditional female weavers, but then, it is well known that it is highly difficult to come back to the past. The contributions of the courses for the two communities are to preserve the cultural heritage of an ethnic group by organizing a small community composed by Seediq and non-Seediq people to learn weaving techniques, and to see the opportunity for reconnecting a cultural ecosystem in a new pattern. Nevertheless, more observation is needed to determine whether such initiative can be fully implemented, and how strong the weaving-based cultural ecosystem reconnection is.

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References

1. United Nations. About the Sustainable Development Goals. Available online: https://www.un.org/sustainabledevelopment/sustainable-development-goals/ (accessed on 11 December 2018).
2. Hosagrahar, J. Culture: At the Heart of SDGs. UNESCO Courier. Available online: https://en.unesco.org/courier/2017-april-june/culture-heart-sdgs (accessed on 29 December 2018).

3.   Helland, J.; Lemire, B.; Buis, A. (Eds.) *Craft, Community and the Material Culture of Place and Politics, 19th–20th Century*; Ashgate Publishing Company: Burlington, UK, 2014.

4.   Harvey, D.C. The History of Heritage. In *The Ashgate Research Companion to Heritage and Identity*; Graham, B., Howard, P., Eds.; Ashgate Publisher: Burlington, UK, 2008; pp. 19–36.

5.   Wang, S.S. *Contemporary Aboriginal Art*; National Taiwan Arts Education Center: Taipei, Taiwan, 2001.

6.   Council of Indigenous Peoples. Available online: http://www.apc.gov.tw/ (accessed on 30 December 2018).

7.   Wang, M.H. Exploration on the Social Nature of the Atayal from the Perspective of Multiple Meanings of Gaya. *Taiwan J. Anthropol.* **2003**, *1*, 77–104.

8.   Tien, K.S. *Face Tattoo Culture of Ethnic Groups*; Taroko National Park Headquarters, Construction and Planning Agency: Hualien, Taiwan, 2002.

9.   Lockhart, G. *Significance and Discussion of Smahug*; Taroko National Park Headquarters, Construction and Planning Agency: Hualien, Taiwan, 2010.

10. Yeh, H.Y.; Wu, M.R. Ethnic Handicrafts and Cultural Industry: A Case Study of Female Taroko Weaving Culture in Xiu-Lin County of Hualien, Taiwan. *Q. J. Stud. Taiwan. Indig. Ethn. Groups* **2014**, *7*, 1–37.

11. Toyuw, Y. Kneril balay na Tayal. *Indig. Lit.* **2015**, *20*, 1.

12. Fang, C.W. Reproduction of Ancestry Garment: Records of the Prehistoric Hall's Re-Collection Plan of Traditional Atayal Garment and Plans for Artifact Collection. In *Reproduction of Atayal: Reproduction of Pan-Atayal Traditional Clothing*; National Museum of Prehistory: Taitung, Taiwan, 2008; pp. 13–23.

13. Liao, S.C. Tribal Migration and Distribution of the East Seediq of Atayal. *Inst. Ethnol. Acad. Sin. Monogr. Series.* **1977**, *44*, 61–206.

14. Pelin, I. *Investigation on the Traditional Weaving Skills and Cultural Asset of Puniri of the Seediq*; Cultural Asset Bureau, The Ministry of Culture: Taichung, Taiwan, 2014.

15. Wang, M.H. Exploring the Transformation of Capitalism from Perspectives of Waya: Economic Changes in a Seediq Community. *J. Archaeol. Anthropol.* **2014**, *80*, 53–102.

16. Tseng, R.L. *Atayal Weaving Culture*/Compiledby Tie Mi, Na Wei Yi: Taichung City, Taiwan. 2000.

17. Sun, D.S. Discussion on Aboriginal Education from the Perspective of Historical Development. *Aborig. Cult. Educ. Newsl.* **1999**, *1*, 2–4.

18. Tseng, L.F. A Pilot Study on Transmission of the Seediq Weaving Tradition and Handicraft Puniri in Nantou County: The Three Generations of Seta Iban as Research Subject. *J. Cult. Herit. Conserv.* **2013**, *24*, 33–57.

19. UNESCO. Text of the Convention for the Safeguarding of the Intangible Cultural Heritage. Available online: https://ich.unesco.org/en/convention (accessed on 10 December 2018).

20. Huang, J.Y. The Proclamation of the International Convention for Intangible Cultural Heritage and Its Methodology of Safeguarding. *J. Cult. Herit. Conserv.* **2013**, *25*, 7–31.

21. Law, J.; Mol, A. *Complexities: Social Studies of Knowledge Practices*; Duke University Press: Durham, NC, USA, 2002.

22. Lin, C.H. The Conservation of Cultural Heritage Needs a New Culture: A Cultural Ecology Viewpoint for the Industrial Heritage Conservation. *J. Cult. Herit. Conserv.* **2012**, *22*, 73–84.

23. Chen, W.L. *The Poetic Character of Thread: In Search of the Peculiar Aesthetics of Taiwanese Aboriginal Weaving Techniques through Theatre Clothing*; Taipei National University of the Arts: Taipei, Taiwan, 2010.

24. Chiang, M.C. Passing on Weaving Techniques Enthusiastically * Weavers Never Stop. *TITV Bimonthly*. (09). Available online: http://www.pulima.com.tw/Pulima/News_16010814182781508.aspx (accessed on 15 December 2018).

25. Goss, J. *The Souvenir and Sacrifice in the Tourist Mode of Consumption*; Routledge: London, UK; New York, NY, USA, 2005.

26. Cohen, E. Authenticity in tourism studies: Aprés la Lutte. *Tour. Recreat. Res.* **2007**, *32*, 75–82.

27. Hu, C.Y. *The Dialogue between Craft Tradition and Modern Commodities and the Art of Saisait Ethnic Group in Consumer Society*; Institute of Yilan County History: Yilan, Taiwan, 2000; pp. 75–96.

28. Ho, S.H. The Commodity and Culture of Taiwanese Aboriginal Dyeing and Weaving Technology 2003. Available online: http://www.hss.nthu.edu.tw/~{}khku/discussion/essay/thesis2.htm (accessed on 20 December 2018).

29. Wu, M.R.; Yeh, H.Y. Tribe Skills/Memory and Cultural Industry: (Re)production of the Culture of Female Weavers of the Tailuge, Xiulin Township, Hualian County. In Proceedings of the 2011 Annual Meeting of Association for Cultural Studies, Hualian, Taiwan, 8 December 2011.

30. Lin, C.H. Older Technology from a Cultural Perspective. In Proceedings of the 2018 Taiwan STS (Science Society Technology) Society Annual Conference Forum, Tainan, Taiwan, 14–15 April 2008.

31. Taichung City Government. Taichung City Indigenous people population statistics. Available online: http://demographics.taichung.gov.tw/Demographic//Web/TCCchart03.aspx (accessed on 25 December 2018).

32. Kaeppler, A.L. *The Pacific Arts of Polynesia & Microesia*; Oxford University Press: Oxford, UK, 2008.

33. Wang, S.S. Fundamental Forms of Intangible Cultural Heritage, Museum Technology and Cultural Governance. In Proceedings of the 4th Symposium on History and Cultural Relics, Taichung, Taiwan, 2–3 November 2018, unpublished.