Chapter 4

Creation Of Contemporary Art

Contemporary art works are created through the synthesis of bodies of knowledge on Mueang Fai wisdom, such as form of construction of weirs and ditches, Mueang Fai organization, rules related to the use of irrigation system, ceremonies and beliefs that are related to Mueang Fai, and operation of the community, from a case of study of Mae Sa River Basin, Mae Raem Sub-district, Mae Rim District, Chiang Mai Province. Such knowledge can be implemented to the restoration of Mueang Fai Wisdom for solving water-related crises, which relies on researching, experiment and explanation in each step of the study, as well as the analysis and synthesis of bodies of knowledge, in order to create contemporary art works that reflect the concepts and paradigms that are related to Mueang Fai System, with the details in the following orders.

- 1. Physical Features and Mueang Fai System
- 2. Communities and Outsiders' Collaborations to Promote Harmony
- Rites to Build Conscious of Communities for Restoration of Mueang Fai System
- 4. Inspiring Creative Art Works
- 5. Concept
- 6. Creation of Contemporary Art Works

4.1. Origins of Concepts and Inspiration

The reviewed Mueang Fai System-related bodies of knowledge include forms of weirs and ditches, Mueang Fai Organization, maintenance work for Mueang Fai System and the feast for Phi Fai (guardian spirits of weirs and ditches), rules for the use of Mueang Fai, relation between Mueang Fai System and agricultural fields, water sharing and distribution in Mueang Fai System and Mueang Fai Agreement. All of the aforementioned aspects are regarded as a water management wisdom called 'Mueang Fai System', which is reflected through the physical features of Mueang Fai, harmony of community members in water management and ceremonies and beliefs that are related to Mueang Fai System, all of which are synthesized for inspiration and direction for creating the contemporary art works. The details are as follows.

4.1.1. Physical Features and Mueang Fai System

To build big weirs across a river with bamboo, wood and rock to raise water level, and to block and direct water to run to agricultural fields through irrigation ditches is the ancient way of water management that has been passed on for 700 years. Mueang Fai Wisdom has been applied to solving crises of flood and draught. Small weirs can be built across small branch water stream can slow down water flow and retain water to solve flood and draught problems. The implementation of Mueang Fai Wisdom is the reliance on water management system of ancient Lanna weirs. Types of weirs are wood weirs, bamboo weirs and rock ones since such materials are available and suitable for the geographic conditions. Weirs are built across rivers and water streams from higher places on hill slope to lower areas, or from branch streams to the main river. Currently, agricultural communities in the level of villages, and members of a Mueang Fai system, which inherit ancient Mueang Fai knowledge from their forerunners use 2 ways to boost the efficiency of water and forest, namely, (1) to fix and maintain weirs and ditches, and (2) to build small weirs in branch water streams around the upstream forest. To fix and maintain weirs (Long Mueang and Ti Fai) are traditions to dredge and fix weirs and ditches that ancestors of communities on the river basin have built since many generations before. They are ancient Mueang Fai. Meanwhile, small weirs are the application of ancient Mueang Fai Wisdom to solving problems of floods from wild water and draught in rainy season and in summer, respectively. Such small weirs, built in forests, help slow down water flow and increase water amount during a dry season. Furthermore, they rehabilitate and restore ecological system of the forests.

The core of water management with Mueang Fai system is to work together to build a Mueang Fai system that directs water to all members in the effective manner, from upstream area, midstream areas to downstream areas. The management is systematic because there is Mueang Fai organization that is administered by the committee the main tasks of which are to allocate water in the fair manner and to encourage sacrifice and generosity among members. Committees are selected by Mueang Fai members and are responsible for allocating water to all members in the fair manner, enforcing rules, agreements and regulations of Mueang Fai, inspecting water use in order to ensure fairness, and looking over the repair and maintenance of

Mueang Fai or the Long Mueang Ti Fai traditions and the feast for Phi Fai (guardian spirits of weirs and ditches), which are activities that promote harmony and collaborations among villager who prepare materials and equipment to be used for dredging the ditches and fixing the weirs to be strong enough to deliver water to members. The rite to fix ad dredge the weirs and ditches include the feast for Phi Fai after the repair and the dredging are over. This rite has the roles to conserve and promote conscious of water and forest conservation and sharing in order to promote sustainability and coexistence between human beings and the nature, and harmony and mutual assistances among water users.

Regulations on the use of Mueang Fai are rules on water use that have been enforced for over 700 years, which have been inscribed as Lanna laws called 'Mang Rai Laws'. These ancient laws include the norms of the use of Mueang Fai by Lanna people. Mang Rai Laws have set the rules and regulations on the use of Mueang Fai for many generations up to the present time, both literally and non-literally, and have been implanted in Lanna farmers as conscious on water use. Mueang Fai rules and regulations are for protecting the rights and preventing the inequality among all members. Even though Mueang Fai rules and regulations are quite strict, Mueang Fai committee always implementing compromising measures to members in order to share and distribute water throughout Mueang Fai system in order to ensure fair water sharing and capability of distributing water throughout the system throughout the year. In case where there is water shortage or draught in a year, members can gather together and request for water distribution in order to get water to nourish their crops. There will be a Mueang Fai meeting in order that all members will consider the request and approve the distribution of water to the requesting members in order to solve the water shortage problem. Therefore, such rules and regulations enable upstream, midstream and downstream members to manage water in a way that is appropriate to each particular circumstance and capable of meeting the need for water during a dry season. The water management through Mueang Fai system includes the making of Mueang Fai agreements to control the water use of all members. Such agreements are rules and regulations that all members agree on and use together. The agreements make all members follow the rules and regulations and agree to pay penalties and to donate money in the form of the annual fee for the maintenance works for weirs and

ditches and for the offerings in the rite to feast guardian spirits of weirs and ditches. The details of the agreements have to be suitable and agreeable to the circumstances and economic conditions in the same period. The details are about mobilization of workforces, quantity of tools and equipment used, rates of penalties, donated money and so on. Mueang Fai agreements are joint resolutions among members, which are literally made.

4.1.2. Communities and Outsiders' Collaborations to Promote Harmony

Harmony is originated from the management of Mueang Fai organization because a weir is a 'Na Mu' asset or the common resource. Community members take parts in 'Long Mueang' (to dredge the irrigation ditches) and 'Ti Fai' (to fix the weir) traditions which require all members to work together to dredge the ditches and to bring tools and materials to fix weirs together on the annual basis. However, villagers had forgotten these traditions due to intervention by governmental agency into the irrigation management by the villagers, which eventually ended due to discontinuity of policies of the government. In the case study, communities on Mae Sa river basin, Mae Raem Sub-district, Mae Rim District, Chiang Mai Province, who are groups of farmers who use water and community leaders, who still rely on Mueang Fai system, have been attempting to promote and sustain harmony in Mueang Fai system. In addition, draught and floods have also made communities work together to find solutions to the problems in the forms of activities to implement Mueang Fai wisdom by building small weirs in small water streams throughout the upstream forest, with the collaborations from people outside the communities, national park officials, resource and environment officials, university students and teachers, who participate in the activities to build weirs in the area of Mae Sa waterfall, which is the implementation of ancient Mueang Fai wisdom of people in Mae Sa river basin area to building small weirs throughout upstream forests, around the small streams that flow t Mae Sa river and Ping river.

From the activities related to the implementation of Mueang Fai wisdom, ways to promote collaborations from outsiders including governmental officials and youths who have arranged and participated in the activities to restore Mueang Fai system are attained. Meanwhile, community members who are urged to rehabilitate water resources are heads of sub-districts, village heads, mayors of sub-

districts, monk groups of sub-district, and villagers whose supports are in the forms of labor, donated money and food for the building of weirs to slow down water current and to retain water. The aforementioned mobilization of labor and supports reflects community members' conscious in using common resources or 'Na Mu' assets together. Mueang Fai and community members' conscious have opened a sociocultural space in the forms of activities to rehabilitate water resources with the implementation of domestic wisdoms to the construction of weirs to slow down water current, which is a way to solve problems of floods and draught, as well as a way to rehabilitate the ecological system of the upstream forests. Villagers and community leaders have been inspired by outsiders, especially the youths, who show to them the opportunities to work together to sustain water resources and forests of the communities.

The rehabilitation of harmony of community members in the case study on Mae Sa river basin relies on 2 groups, namely, insiders and outsiders who work together to habilitate water sources by implementing Mueang Fai wisdom to arranging activities that allow everyone to work together. Harmony, thus, emerges from the original root in Mueang Fai system, with agriculture being the drive that leads to the extension of the rehabilitation of water sources and forests. Such activities are parts of contemporary Lanna society that is built on the society and culture that leads to the extension of wisdoms or innovations. Such wisdoms and innovations are generated from accumulation, inheritance and earning, and can be applied to problem solving. Thus, the application of Mueang Fai wisdom is a way to solve flood and draught problems and to rehabilitate harmony and collaboration among community members.

4.1.3. Rites to Build Conscious of Communities for Restoration of Mueang Fai System

by Chiang Mai University

Mueang Fai system, society and culture generate interrelationships among human beings, between human beings and the nature, and between human beings and super-natural things. As for the conservation of water and forests, rites and ceremonies are important tools to drive the society through socio-cultural ideology. Rites to feast guardian spirits of water and irrigation system, ceremony to consecrate the river, and rite to offer trees to monks in order to restore forests are used as means to urge community

members to conserve water and forests with beliefs and faith in the 'Phi Fai' (guardian spirit of irrigation system). Each year, after a Ti Mueamg (to fix weir) rite or a Long Fai (to dredge the irrigation ditches) rite, people will prepare offerings such as a pig, local spirit, desserts, flowers, candles and joss sticks to hold the feast for Phi Fai. After the feast, the members will cook the offerings and eat them. The beliefs and rites related on the feast for Phi Fai implant the socio-cultural ideology in order that all members can work together to maintain the Mueang Fai system to deliver water effectively. The rite that allows members to have a chance to have a meal together helps build harmony and inter-dependence among Mueang Fai members.

The rite to feast Mueang Fai guardian spirits is related to the rite to feast water and water sources guardian spirits. The feast for water guardian spirits is the rite to pay respect to water springs (Khun Nam) which are on slopes of mountains and form small water streams that gather together as a river. Thus, the rite to feast Phi Khun Nam (water guardian spirits) is a rite to worship a water spring or a stream whilst the rite to feast Phi Fai is held at a weir that block a big river. Both rites have relation and similarity in term of respect to the nature, water an forests, which is reflected through the rite to worship and ask for sufficient water throughout the year, abundant foods, proliferating crops and absent natural disasters.

As for the rites to consecrate the river and to offer trees to monks to restore forests they are the implementations of rites to building community members' conscious. The rite to consecrate the river is adapted from the rite to bless a patient with bad health conditions. This blessing ceremony is applied to the rehabilitation of deforested areas where there are flood and draught crises. In the rite to consecrate water relies on the sacredness of Buddha images and chanting in order to bless an area with sufficient water and seasonal rain. There is also the chanting of 'Matcha Phraya Plachon' (King of Snake-head Fish) to evoke the rain. This chanting refers to the story of a former life of Lord Buddha as the King of Snake-head Fish. In the story, there was draught in the area. Crops died and water dried off. Aquatic creatures were eaten by vultures, hawks, crows and herons. The King of Snake-head Fish prayed for the rain. Indra god, thus, ordered the god of rain to pour the rain in the area. Therefore, this story is chanted in a rain evoking rite. At the same time, the rite to offer trees to monks to restore forests is a rite that relies on the sacredness of Lord Buddha, Lord

Buddha's teachings, and Buddhist monks, or the three gems of Buddhism. Like things offered to monks, trees that are offered to monks are regarded as the assets of temples and common assets of the community members. Thus, the forests are protected with the three gems of Buddhism from deforestation. This rite can partly urge people to rehabilitate upstream forests in order that they will become fertile and sacred areas. This rite is like the rite to ordain trees in the North of Thailand where trees are tied with yellow monk robes in order prevent deforestation.

The application of rites to feast water guardian sprits, to feast Mueang Fai guardian sports, to consecrate river and to offer trees to monks can urge community members to work together to rehabilitate water sources and forests with rites and beliefs that are related to Mueang Fai system. Such rites build relationships among human beings, between human beings and the nature, and between human beings and super-natural things.

4.1.4. Inspiring Creative Art Works

The creation of works by Pricha Thaothong (1979), which are paintings in the 'Forms of Light on Shadow Space' project has suggested the concept and discovery on 'light and shadow' that the phenomenon of light and shadow will be complete when it has 3 factors, which are, the light from its origin (sun), an opaque medium (wall or any object that blocks the lights creating shadows) and object on which the light is on (a screen to receive both light and shadows such as a wall of a temple where the phenomenon of light and shadow is). All the 3 factors are interrelated and inter-dependent to one another as causes – effects. None of the three can be missing. In his work, the artist assumes that the form of light on the temple wall is a floating form whilst the dark shadow on the wall represents the space. The forms of light and the spaces of shadows are the positive and negative meanings. The forms of light that are occupying less space in the frame trick audiences to imagine that the forms of light are freely floating on the dark endless space. However, both light and shadows in different directions, areas and amounts are the results from light from the origin, opaque objects and screens. Works of light and shadow create the feelings of calmness and concentration (Pricha Thaothong, 1979: 11 - 12).

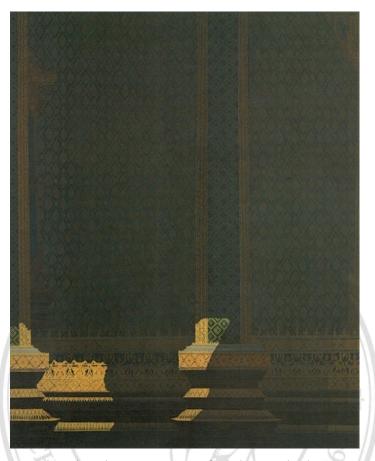


Figure 4.1 Preecha Thaothong, 'Forms of Light on Shadow Space 1', 1979 Technique: Acrylic on Canvas, Dimension: 170 CM Length × 140 CM Width

Light and shadow in the aforementioned painting series create continuous movements whilst the various motifs build the contrast, which creates emotional changes from one feeing to another. Light and shadow build the abstract feeling as the subconscious of concentration and imagination. Meanwhile, works by Elizabeth Ogilvie (2005 – 2006) in the 'Bodies of Water' project, which are exhibited in a gallery in England, show the movement of water. The exhibition hall is designed to contain water which is controlled and drained out with an electronic system to the exhibition room. A big tub is built to contain water. Video media and light and shadow on walls are used. Audiences can walk around the water tub. Also, there is live music played while the contents are presented on the walls. When water drips into the tub, water drop and light affect audiences and lead to imaginations in different dimensions.

Elizabeth Ogilvie presents the drawing of water to enable audiences to attain experiences from observation. The water is moving and reflecting light, which is like people's experiences that vary. New environs that audiences are not accustomed to, which are built from time and spaces, are introduced to audiences. Experiences on the movements that are related to water, from this creative project, enable audiences to have experiences and to explore the most valuable natural resource of human life (Elizabeth Ogilvie 2005, 32-35).



Figure 4.2 Elizabeth Ogilvie's Work: "Bodies of Water" (2005) Installation of PVC and Wood Tub, Technique: Water, Light and Video Control with Electronic System;

Dimension: 5 M. Height x 23.5 M. Length x 15.5 M. Width

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Figure 4.3 Elizabeth Ogilvie's Work: "Bodies of Water" (2005)

4.2. Concept

Concepts of this project are 1) Physical Features and Mueang Fai System, 2) Communities and Outsiders' Collaborations to Promote Harmony, 3) Rites to Build

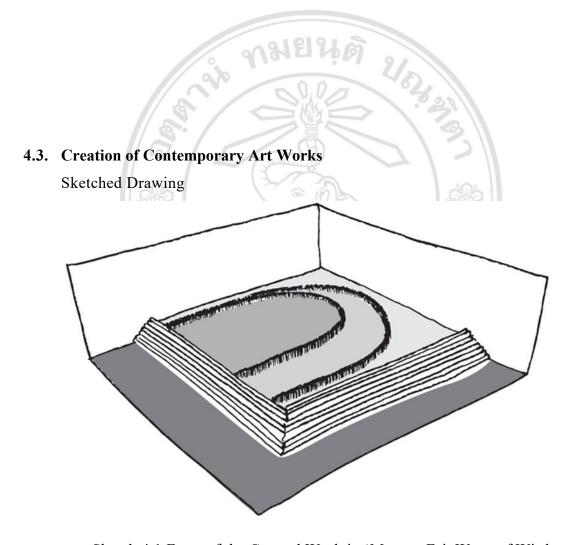
Conscious of Communities for Restoration of Mueang Fai System, and 4) Inspiring Creative Art Works. I, the researcher, have been inspired by such concepts to create an art work in the form of a bamboo weir (Fai), which is added with systems to lever the water level, to retain water and to deliver water to the irrigation ditch until the work is in the form of a big weir. The work is built as a square weir built with bamboo sticks aligned in layers to symbolize the collaboration and harmony of people. The system to raise water level and the steps of the weir are built as the system of water circulation within the weir.

The influences from the works by the 2 artists are the movements of water and natural environs such as the change of reflected light through screen, trees and buildings, which have the implications of the beliefs in water and forest, respect to the nature, rites and conscious of community members. The main issues are presented in the form of a big weir installed together with natural environs in the external area of the at Chiang Mai University Art Culture, such as sunlight, trees and buildings. The wall screen is set up in order to project the movement of water and light reflection.

As for the stories from the communities on the rehabilitation of the harmony and the arrangement of rites to build the conscious of community members rehabilitate Mueang Fai system, a documentary video presentation is made. The contents concern field research and activities to rehabilitate Mueang Fai system with communities, which lead to the attainment of information from the close look and actual actions on community problems. The contents also cover the analysis and pursuit for solutions to water crises with communities, the abandonment and rehabilitation of Mueang Fai, and the use of rites to urge communities to have conscious to conserve water sources of their communities with Mueang Fai wisdom. As for the activity to hehabilitate Mueang Fai system, Mae Sa river basin in Mae Raem Sub-district, Mae Rim District, Chiang Mai Province, is selected as the area of the study in which the activities to rehabilitate Mueang Fai wisdom. The video presentation is made and shown together with the created work.

The concepts of the creation of symbols from Mueang Fai wisdom include the issue of the abandonment of Mueang Fai system by community members, and the rehabilitation of community members' conscious with beliefs and rites that are related to water and forests are used for creating the movement of water which is recognized as an abstract recognition in the work in the 'Mueang Fai: Water of Wisdom between Humans and Nature' project, which is presented in the installation art style and documentary video to

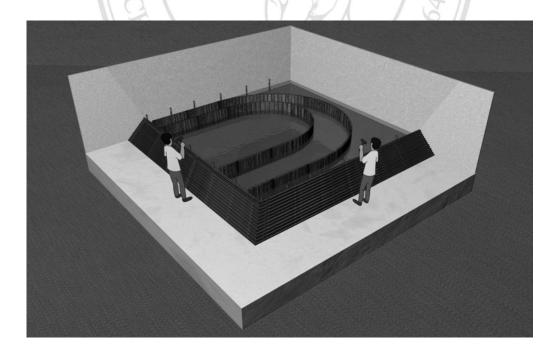
present the process of the rehabilitation of Mueang Fai system to urge communities treasure and love water sources and natural resources.



Sketch 4.1 Form of the Created Work in 'Mueang Fai: Water of Wisdom between Humans and Nature' Project



Sketch 4.2 Development of Graphic from the Sketch of the Work in 'Mueang Fai: Water of Wisdom between Humans and Nature' Project with Dimension of 480 CM Width × 480 CM Length; Installation Technique: Bamboo Sticks, Water Tub, Light and Video Presentation



Sketch 4.3 Development of Graphic from the Sketch of the Work in 'Mueang Fai: Water of Wisdom between Humans and Nature' Project with Dimension of 480 CM Width ×480 CM Length; Installation Technique: Bamboo Sticks,

Water Tub, Light and Video Presentation



Sketch 4.4 Development of Graphic from the Sketch of the Work in 'Mueang Fai: Water of Wisdom between Humans and Nature' Project with Dimension of 480 CM Width × 480 CM Length; Installation Technique: Bamboo Sticks, Water Tub, Light and Video Presentation

4.4. Selection and Development of Sketched Drawing of the Created Work

The 4 sets of the sketched drawings of the work in installation art style are made and presented to experts. Finally, the sketch that can reflect concepts and imaginations that are most concurrent to the origins of the creativity from Lanna Mueang Fai system is selected. After adjustment, and development of forms and tecniques to create the work, 2 sets of complete sketches are made. These sketches are tested and used as the rototype for the creation of the real work in further steps.

4.5 Preparation of Materials for Creating the Work

The prepared materials are as follows. 1) Sang Bamboo (Dendrocalamus strictus (Roxb.) Nees) is a big bamboo plant with glossy light green thornless stems and a great number of branches. It is around 6-20 centimeters high and a stem is around 5-8 millimeters thick. A stem is comprised of sections each of which is around 15-50 centimeters long and has rough texture. In general, the diameter of a stem is 5-50 centimeters long and has rough texture.

- 12.5 cenimeters. The plants found on a high mountain may have stems the diameters of which rank between 2.5 and 10 centimeters.
- 1. Bong Bamboo (Bambusa nutans Wall) is a medium size bamboo stems of which have diameters of 5 8 cenimeters and grow in a dense clump with branches at the tips. Branches are huge and can grow perpendicularly to a stem. The sections near the ground can have roots growing out. Since his bamboo has a lot of branches, its stem looks bending. The stems has textures that look like pale yellow or grey hairs or powder on the stems.
- 2. Ruak Bamboo (Thyrsostachys siamensis Gamble) is a small bamboo that grow in a dense clump. The diameter of a stem is 2.5 centimeters and the height is 5-10 meters. This bamboo has no thorns on its stems but the upper side of its leaf has small hairs. The stem spathes are thin and attached to the stem. The do not fall out even when they grow old. The spathes of shoots are white. A section of a stem is 7-23 centimeters long.

Sang bamboo sticks, Bong bamboo sticks and Ruak bamboo sticks, as well as hardwood, rocks and tree branches, are materials that farmers who are Mueang Fai members used for building a weir. Bamboos are materials that reflect harmony and collaboration among farmers who bring their bamboo sticks to buid a big weir by building an obstacle across a big water stream or river from the ridge of the weir, which is the highest point of the weir, in downward steps to the lower place. Long Mueang Ti Fai traditions or the traditions to fix the weir or to dredge the ditches annually will ensure the strength of the weir and can assure that the weir can deliver water coonveniently. Therefore, bamboo is a symbol of weir and irrigation ditch. Based on the aforementioned ideas, I, the researcher, use bamboo stiks as the materials to build a square weir wih water way from top level downward in steps, with natural components such as trees, wall screens and sunlight installed.

4.6 Preparation of Place and Installation of Work

The work is installed in the installation art style that allows the work to be adjustable in accordance with the features of the exhibition place. Therefore, it is necessary that the place chosen to be the exhibition place must be agreeable to the installed work and components with the focus on the reflection of concepts and imaginations. The chosen place is a spot outside the building with natural components

such as trees, sunlight and wall screen and the created weir that can show the phenomena of movements of water and light. The weir is built as a bamboo weir with waterway on 2-3 stepped layers that direct water flow from the op layer downward. The wall screen to receive reflected light is installed beneath tree branches. Water flow is directed. Light reflected from water and shadows of tree branches will be shpwn on the screen.

In addition, the documentary video presentation is also shown at the place where the work is exhibited in order to show the activities on rehabilitate Mueang Fai system of communities in Mae Sa river basin, Mae Raem Sub-district, mae Rim District, Chiang Mai Province. A 60 inches television and sound system are installed in order to show the presentation on activities to build weir to slow down water current, and to hold the rites to feast water guardian spirits, to bless forests and to offer trees to monks to restore forests. Such activities are parts of the research project and the activity to rehabilitate Mueang Fai of the communities.

4.7 Pre-thesis Created Work

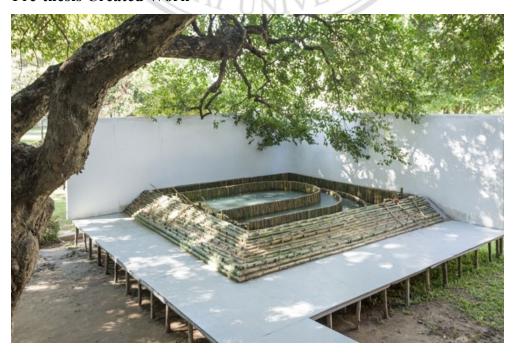


Figure 4.4 Pre-thesis Work Entitled 'Mueang Fai: Wisdom of Humans and Nature'; Installation Techniques: Bamboos, Water Tub, Light and Video Presentation; Dimension of Work: 480 CM Width x 480 CM Length; Exhibition Period: 13th – 16th November 2017, at Chiang Mai University Art Culture



Figure 4.5 Details of the 'Mueang Fai: Wisdom of Humans and Nature' Work

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Figure 4.6 Details of the 'Mueang Fai: Wisdom of Humans and Nature'
Work and Weir Fixing (Ti Fai) Activity



Figure 4.7 Details of the 'Mueang Fai: Wisdom of Humans and Nature'
Work and Weir Fixing (Ti Fai) Activity



Figure 4.8 Reflection of Water Movement from Ti Fai Activity on Wall Screen

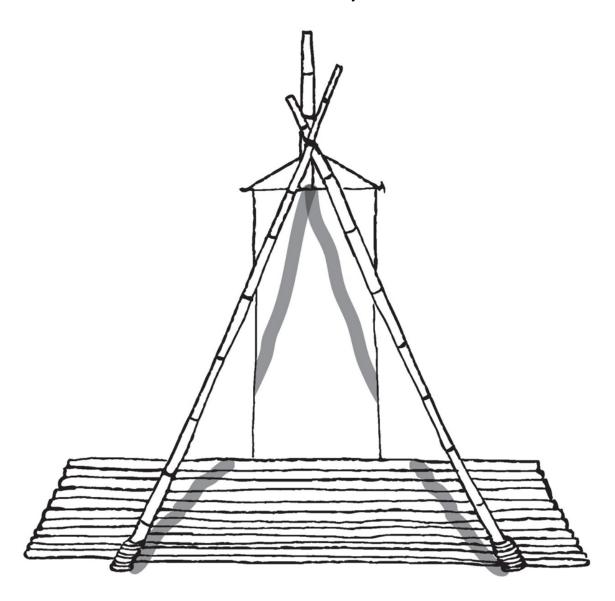


Figure 4.9 Audiences to Exhibition of Work in 'Mueang Fai: Wisdom of Humans and Nature' Project

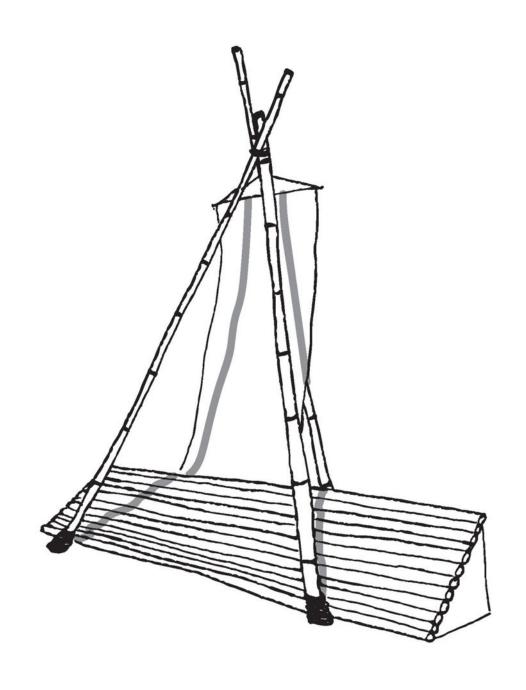


Figure 4.10 Audiences to the Exhibition of the Pre-thesis Work Having Ti Fai
Activity Together

Sketch 4.5 Pre-thesis Documentary Video Presentation



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sketch 4.6 Pre-thesis Documentary Video Presentation



Figure 4.11 Presentation of Pre-thesis Documentary Video Presentation Entitled 'Mueang Fai: Water of Life of Mae Sa River Basin'; Installation Techniques:

Bamboos and Video Presentation; Dimension: 12 M Width x 7 M Height;

Exhibition Period: 14th – 18th October 2017,

at Chiang Mai University Art Culture



Figure 4.12 Pre-thesis Documentary Video Presentation Entitled 'Mueang Fai: Water of Life of Mae Sa River Basin'



Figure 4.13 Details of the Installation of Art Work with Documentary Video
Presentation igure



4.14 Details of the Installation of Art Work with Documentary Video Presentation



Figure 4.15 Contents of Documentary Video Presentation Entitled 'Mueang Fai:

Water of Life of Mae Sa River Basin' Presenting the Story of the Rehabilitation of

Mueang Fai Systen by Communities in Mae Sa Rover Basin,

Mae Raem Sub-district, Mae Rim District,

Chiang Mai Province; Length: 5.50 Minutes

4.8 Contents and Meanings of Pre - thesis Created Work

The pre-thesis work in the 'Mueang Fai: Wisdom of Humans and Nature' project aims at showing the application of Mueang Fai wisdom by communities to water management, activities to fix weirs and to dredge ditches or Loong Mueang and Ti Fai traditions, and harmony of all the people related to water management by communities. The contemporary art works, based on concepts of Mueang Fai wisdom, are created with the installation art technique. The main work is comprised of the concepts of weirs and irrigation ditches and has the dimension of 480 centimeters width by 480 centimeters length, using the installation techniques if bamboos, water tub, light and video presentation. The tub weir that is created is filled with water so that audiences can have the Ti Fai (weir fixing) activity and observe the change of the movement of the reflection shown on the wall screen. Audiences can Ti Fai by using hammers to hammer on bamboos, which allow them to understand how ancient people built, repair and maintain weirs. Ti Fai activity causes water around the walls of the tub weir to move. In addition, sunlight that reflects on the water surface is shown as shadow on the wall screen, together with shadows of branches and leaves (figures 4.6 -4.8).

There is also the other work that is the video presentation on the abandonment of Mueang Fai by community members in this 'Mueang Fai: Wisdom of Humans and Nature' project, which is shown on 42 inches television screen. This work presents the contents of ancient Lanna Ti Fai tradition such as the Mueng Fai committee checking the name of attendants to Ti Fai tradition, the counting of bamboos and equipment, and the collaboration by all villagers. The contents of the video presentation emphasize on the importance of the harmony in Ti Fai tradition. The sound of hammered wood can be heard anywhere around the exhibition site. The story of Ti Fai activity is shown in the video presentation in order to allow audiences to attain information from the documentary video presentation on Lanna Ti Fai activity, together with the Ti Fai activity and the creation of Lanna Mueanng Fai based- art works.

Conclusion and Discussion on Pre-thesis Art Work

The pre-thesis work in the 'Mueang Fai: Wisdom of Humans and Nature' project has the main contents about the abandonment of Lanna Meang Fai system which is adapted to the creation of the work in the installation art style, installed outside the exhibition building of Chiang Mai University Art Center. The main work is installed to work with sunlight, wall screen and trees, and is built as a tub weir with hundreds of bamboo sticks, with the aims at restoring the importance of weirs, urging people to have conscious in collaborating with one another to maintain weirs and irrigation ditches in the ambience of the nostalgia for weirs that are beginning to be forgotten by Lanna society, and opening a new space for audiences to learn about Mueang Fai system through activities that urge attendants to think about water management system by local communities. The installation of the work leads to the findings that the audiences' hammering the model weir causes vibration throughout the tub weir. If audiences hammer the weir violently, the vibration radius of water will be wide. Meanwhile, if the hammering is soft, the water vibration radius is narrow. If the violence of the hammering varies, the water vibration radii vary as well. The hammering works together with the changes of reflection. At the time when the sun shines upon water surface, there are shadows of water movement, tree branches and leaves on wall screen. These shadows are also created from the audiences' hammering the weir, which causes the phenomena of sunlight and water movement on the wall screen, with the sun being the source of light that is consistently moving from sunrise to sunset. by Chiang Mai University

The outputs from the installation of the pre-thesis work in the 'Mueang Fai: Wisdom of Humans and Nature' project are the discovery and the extensive development of thesis, which are as follows.

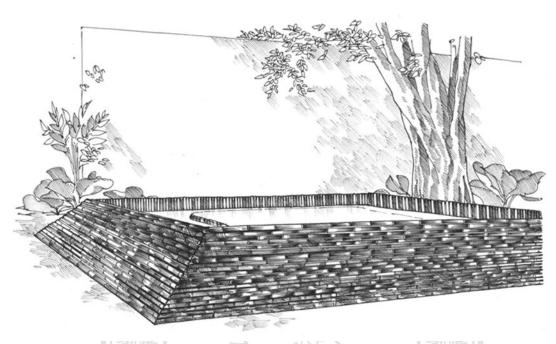
(1) The created work is a square weir which is made from a metal tub. The weir has three stepped layers. Two walls of the tub are built with bamboo sticks and the other two are wall screens, trees, branches and leaves. Audiences can interact with the work by hammering the weir

- to cause water vibration that works with sunlight and is reflected on the screen, trees, branches and leaves.
- (2) The contents that are related to Ti Fai tradition emphasize on the importance of Mueang Fai system and collaboration, which have been gradually dissolved. The presentation of the contents of Ti Fai tradition through the created work has created new meanings in the art space and stories that are based on Lanna Mueang Fai.

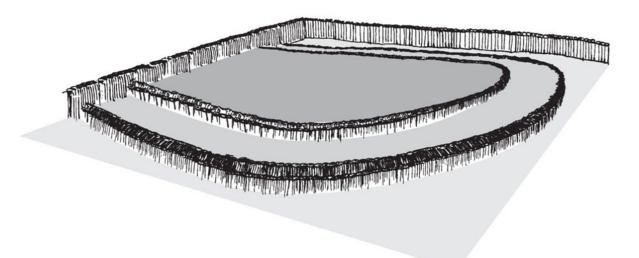
Issues and obstacles for the creation of the pre-thesis work in the 'Mueang Fai: Wisdom of Humans and Nature' project include the quality of water that has been retained in the weir for a long time without circulation until the water becomes waste water, the number of water ways in the tub that is too great, and the case where waterway 3 is too close to the wall until it cannot allow precise vibration, which is different from waterways 1 and 2, which are the two upper layers at the center of the tub. The areas that can be well affected by the hammering of the weir are the waterways at the center. In addition, the water level that is too high does not affect the reflection of shadows on wall, trees, branches and leaves.

The development and extension to thesis work is to put together all the concepts of the physical features and Mueang Fai system, communities and outsiders' collaborations to promote harmony, rites to build conscious of communities for restoration of Mueang Fai system, and inspiring creative art works, all of which are used for created the work as a bamboo weir with systems to elevate water level, retain water and deliver water through irrigation ditches, which later has been rebuilt as a bigger weir in square shape by piling bamboo sticks in order to symbolize the collaboration and harmony of people. The system of water elevation and stepped layers are built as the water circulation system within the weir. Meanwhile, influences from the studied works of the two artists are reflected through the creation of the phenomena of water movement and natural environs such as the change of reflection through screens, trees and buildings, which has the implications of beliefs in water and forests, which create the water movement as the abstract recognition on the works in 'Mueang Fai: Water of Wisdom between Humans and Nature.' The work in installed with installation art technique as follows.

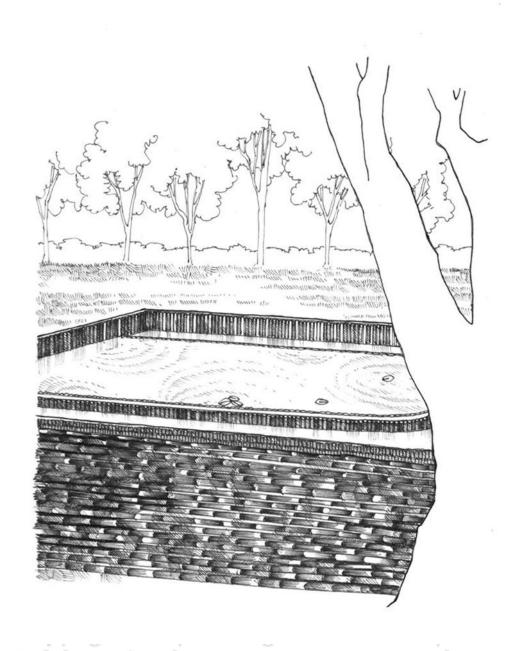
4.9 Sketches



Sketch 4.7 Sketch of Work in 'Mueang Fai: Wisdom of Humans and Nature' Prject; Size: 700 CM Width × 800 CM Length; Installation Techniques: Bamboos, Tub, Light and Video Presentation



Sketch 4.8 Waterways Divided into 2 Layers with Top – Down Water Circulation within the Tub



Sketch 4.9 Water Circulation from Top Layer Downward

4.10 Thesis Work



Figure 4.16 Thesis Work in 'Mueang Fai: Water of Wisdom between Humans and Nature' Project; Installtion Techniques: Bamboo Weir with Trees, Light and Time; Size: 700 CM Width x 800 CM Width; Exhibition Period: 9th – 29th January 2017, at Chiang Mai University Art Culture

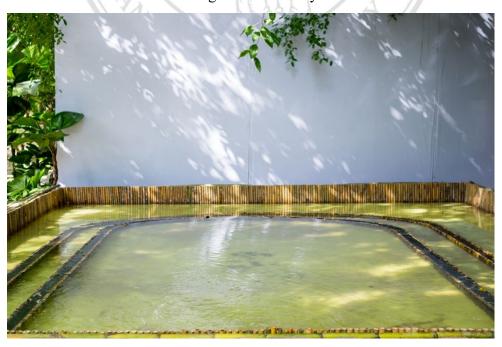






Figure 4.18 Stepped Flow of Water in Weir

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Figure 4.19 Reflection of Shadow on Water in Weir

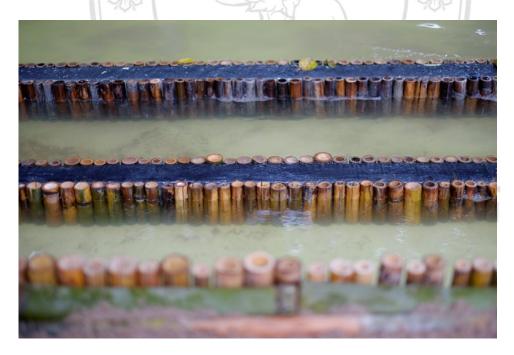


Figure 4.20 Stepped Layers of Water in Weir



Figure 4.21 Water
Circulation and Light
Reflection

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Figure 4.22 Water Flow and Light Reflection at the Front of Weir



Figure 4.23 Arrangement of Bamboo Sticks into Big Weir with Water Circulation System Attracting Audiences' Attention

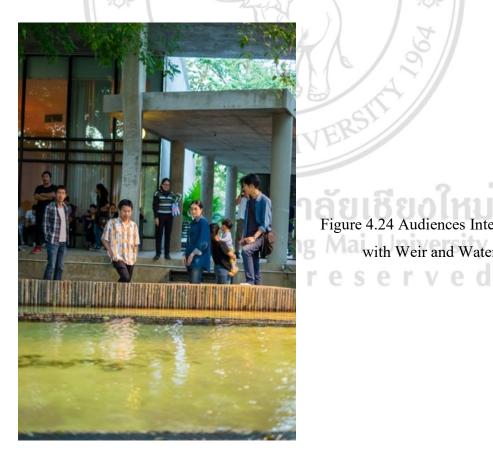
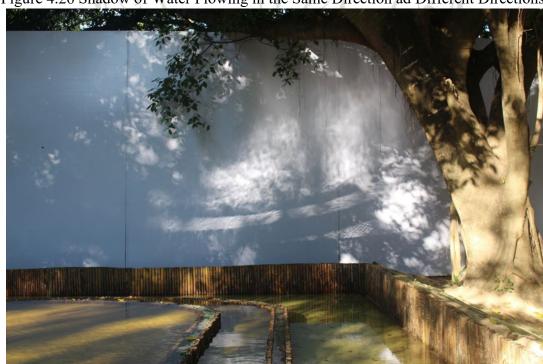


Figure 4.24 Audiences Interacting with Weir and Water



Figure 4.25 Light Reflection in the Morning on Wall and Trees, and Water Movement Causing Stepped Shadows

Figure 4.26 Shadow of Water Flowing in the Same Direction ad Different Directions,



with Glowing Light, Spreading on Wall, Tree Branches and Trunk, and around Installed Weir



Figure 4.27 Exhibition Board Showing Concepts, and Documentary Video Presentation on Mueang Fai Restoration Process, Installed with Work



Figure 4.28 Audience Watching Video Presentation on Research on Mueang Fai
Restoration with Communities



Figure 4.29 Video Presentation on the Use of Rites for Restoring Community Water Sources

4.30 Examples of Excerpts from Video Presentation Entitled 'Mueang Fai: Water of Life of Mae Sa River Basin'







Figure 4.30 Examples from Video Presentation on Mueang Fai: Water of Life of Mae Sa River Basin; Length: 5.50 Minutes

4.11 Contents and Meanings of Created Work

The creation of the work in 'Mueang Fai: Water of Wisdom between Humans and Nature' project has the main objective to present the issue of the abandonment of Mueang Fai system by communities in order to urge community members to have conscious in water use and rehabilitation of water sources so that they can have water for use and consumption. To build such conscious is to apply Mueang Fai wisdom to creating the water sources for communities, holding sacred rites and creating art works. All the aforementioned techniques make all the involved people love and treasure Mueang Fai wisdom of the communities. The create work in the 'Mueang Fai: Water of Wisdom between Humans and Nature' is the imitation of water circulation in Mueang Fai system in a bamboo weir n square shape the dimension of which is 700 centimeters × 800 centimeters, which fits the size of the space for installation. The weir is installed underneath a big and shady tree the branches of which grow over the installation space. Bamboo sticks are horizontally aligned as the walls and ridge of the weir. The weir is built to have two stepped layers. Bamboo sticks are vertically placed as walls of waterways inside the weir in order to retain and direct water to flow from the higher level to the lower one. The wall screen is in white color to receive the reflection of light, together with trees and surrounding natural environs (figures 4.16 - 4.23).

The arrangement of the created work that is based on Mueang Fai system aims at emphasizing on the significance of Mueang Fai system that is the heritage and wisdom on water source management that has been passed on from a generation to another in order to conserve water to be used and consumed. Abandoning Mueang Fai wisdom, the communities will lack of water and experience flood and draught problems. The use of bamboos for building the created weir represents the 'harmony' of community members who contribute to the building of a weir by offering bamboo sticks, their efforts and foods to building the weir to be strong. The water circulation system in the created weir is the wisdom to retain, direct and release water to circulate within the weir from high land to lower land through irrigation ditches. In the past, there were agreements and regulations to ensure fair water distribution which was the foundation of collaborations among community members. The water circulation system in the created work enables audiences

to understand the importance of weirs and irrigation ditches in the water management systems by the communities and the significance of the Mother Nature that has always been providing natural resources to humans.

The creation of the work that is installed with natural environs leads to the findings that the reflection of water movement from the water circulation system appears on the prepared wall screen. The water that circulates and flow throughout all the levels causes vibrations which are reflected as water lines and waves on the screen, trees and leaves. Light that shines through trees makes the work glitter. Initially, it is discovered that the water circulation in the created weir can create reflection of water vibration and flow from the upper level to the lower one (figure 4.25).

The movement of light reflection changes as time passes by. This fact is also discovered from the creation of work. From morning to noon, the reflection shows the form of the weir that is in the stepped layer with the reflection of water waves as water lines that flow in the same direction or in different directions. The light that is reflected from the weir spreads out, creating more frequent shadows because the light shines to the beginning spot of the waterways causing a faster movement, with the contrast to the shadow of the water at the base that slowly moves in the flow direction like ripples (figures 4.25 - 4.26).

Before noon, the reflection of water waves on the wall expands to the edge of the shadow of the weir. The speed of the light movement decreases and eventually disappears from the wall screen. The reflection circulates clockwise and reflects the shadows of ripples to audiences and corridors of the Chiang Mai University Art Culture. The phenomena of the reflection from the weir attract audiences to experience the water and light in the work.

The video presentation shows the process of the study on the problems relating to Mueang Fai system abandonment. Ways to solve the problem with community process are shown as the documentary video presentation entitled 'Mueang Fai: Water of Life of Mae Sa River Basin', lasting 5:50 minutes. The objective of this video presentation is to record the water source rehabilitation with Mueang Fai wisdom by communities. The application of weir to retaining water and slowing down water current, the use of sacred rites to urge community members to treasure water sources, the collaboration between local communities and outside networks such as governmental and private organizations

and groups of youths for running creative activities to rehabilitate water sources with Mueang Fai wisdom are bodies of knowledge attained from the study and research in Mae Sa river basin in Mae Rim District, Chiang Mai Province, which is an important branch river of Ping River in Chiang Mai Province.

The contents of the video presentation show the upstream water surces of Mae Sa River, which are water springs, streams and rivers and the use of Mueang Fai wisdom to distribute water to farmers in Mae Sa river basin, Mae Raem Sub-district, Mae Rim District, Chiang Mai Province. Weirs and irrigation ditches in the area of Mae Sa river basin are used for growing crops in Mae Rim district. In addition, Mae Sa River is the source of water used for producing pipe water for the use and consumption in Mae Rim district including the governmental office center, tourism sector and hotels before flowing to Ping River. Mae Sa River is one of the most important branch rivers of Ping River next to Mae Taeng River and Mae Rim River.

The middle section of the video presentation presents the contents related to weirs and water management issues. In a dry season, people use water from weirs to grow their crops but the amount of water is not great enough. Thus, farmers have to share water with the water authority that produces pipe water. There have been incidents where water delivery has to be stopped for several days and there is not enough water to be distributed to water users. There are just weirs and Mae Sa River that have water for users in Mae Sa river basin area and nearby sub-district. There are fights for water. On the other hand, during the rainy season, wild water floods over agricultural areas leading to the closure of 'Mae Sa Waterfall' which is a tourist attraction. The aforementioned issues are flood and draught problems that happen every year.

The contents in the final session concern the implementation of Mueang Fai wisdom to the rehabilitation of water sources such as to build weirs, to restore forests, to hold rite to consecrate water to evoke rain, to set fish free and to offer trees to monks in order to restore forests. The implementation of Mueang Fai wisdom is the process that builds the conscious in water source conservation, emphasizes on the importance of weirs and restores forests through activities by 'outsiders' such as students, community leaders and monks who work together to run activities with communities in order to urge people to be conscious in water conservation.

In term of Audiences' criticism from interview and observation methods, showed their feeling about this work in 2 issues which are; (1) the audiences who grow up and live under the context of Thai culture expressed their feeling beyond the phenomenon of the art work which is from Muang Fai Lanna story shown the water reflection and the natural light which were reflected on the wall, trees and building. (2) Thai youth and foreign audiences are aware of the important of water and natural resources and experience a new way of art work creation. These 2 issues are the 2 circles of people which are the people who grew up in the inside the cultural context and outside the cultural context, led the essential point at the overlapping zone is the important of water resource. Moreover, Video documentary showed the restoration of water resource by used the ritual, this led the people aware of the water and natural resources and try to retain it and go through the drought and flood crisis.

