

## **Eco Art: Bamboo and Silat Spirituality in the Integrated Space Design**

Widya Poerwoko

Program Doktor Penciptaan dan Pengkajian Seni, Institut Seni Indonesia Yogyakarta  
Jalan Suryodiningratan No. 8, Yogyakarta 55143

*E-mail:* ruasbambu@yahoo.com

### **ABSTRAK**

#### **Eco Art: Bambu dan Spiritualitas Pencak Silat dalam Disain Ruang Terintegrasi.**

Berita tentang perubahan iklim dalam fenomena *Global Warming* penting untuk diperhatikan. Meski peristiwa tersebut sulit dibayangkan oleh masyarakat pedesaan, namun faktanya fenomena tersebut telah mengakibatkan para petani mengalami kegagalan panen dan hampir tidak dapat lagi memprediksi waktu tanam. Di luar fenomena tersebut, persoalan lingkungan juga terjadi di kaki Gunung Merapi, Sleman, Yogyakarta. Penambangan pasir liar di pemukiman penduduk, telah mengakibatkan menyusutnya populasi tumbuhan dan rusaknya tata guna lahan, sehingga berdampak pada menurunnya permukaan air tanah dan air permukaan. Kerusakan lingkungan berawal dari terpecahnya cara pandang orang akibat dari munculnya perbedaan antara humanisme dengan ekologis, pengetahuan dengan nilai-nilai, dan tubuh dengan spiritualitas. Pencak silat, sebagai seni bela diri Indonesia yang tunduk pada keselarasan antara manusia dengan lingkungan alam tempat hidupnya, dapat menggugah kesadaran orang setempat untuk mempertimbangkan kembali kebiasaannya yang dapat merugikan lingkungan dan alam. *Integrated Space Design* sebagai manifestasi estetis *Eco Art*, merupakan karya seni yang diciptakan untuk menjawab persoalan lingkungan yang terjadi di kawasan kaki Gunung Merapi, yaitu dengan mewujudkan ruang, wadah atau jembatan interaksi antar manusia, manusia dengan lingkungan buaatannya dan alam seputar hidupnya, dengan menggunakan tanaman bambu sebagai medium utamanya, dan spiritualitas silat sebagai inspirasinya sehingga dapat melestarikan daya hidup masyarakat setempat, baik secara ekologis maupun spiritual.

Kata kunci: *eco art*; bambu; silat

### **ABSTRACT**

News about climate change in the phenomenon of Global Warming worth serious considerations. Although these events are difficult to imagine by rural communities, in fact the phenomenon has resulted in farmers experiencing crop failure and can hardly predict cropping time. Apart from this phenomenon, environmental problems also occur at the foot of Mount Merapi, Sleman, Yogyakarta. Illegal sand mining in residential areas has resulted in a shrinking of the plant population and impaired the land use, resulting in a decrease both in the groundwater and surface water level. Environmental damage starts from the split of people's perspectives as a result of the emerging separations between humanism and ecology, knowledge and values, and the body and spirituality. Pencak silat, as an indigenous Indonesian martial art that is subject to harmony between humans and the natural environment on which they live, can arise the awareness of local people to reconsider habits that are harmful both to the environment and nature. *Integrated Space Design* as the aesthetic manifestation of *Eco Art*, is an artwork created to address environmental problems that occur in the foot area of Mount Merapi namely by creating a space that bridges the interactions between humans, between humans and their artificial environment, and between humans and their surrounding nature, by using bamboo plants as its main media, and silat spirituality as an inspiration in order to sustain the living power of the local community, both ecologically and spiritually.

Keywords: *eco art*; bamboo; martial art

## Introduction

In 2002 the UN predicted that the lowland forests of Kalimantan and Sumatra, which were the main habitats for orangutans, would vanish by 2032. But in 2007, researchers found that the rate of forest destruction was actually faster, which led to the conclusion that forests on both islands would be extinct ten years faster than previously thought. The massive looting of forests in the headwaters areas has caused destruction of ecosystems from upstream to downstream of the rivers on which people depend their lives. This has threatened the sovereignty of people's lives as well as the intrinsic values contained in the river ecosystem.

According to a lecturer at the Faculty of Forestry, Bogor Agricultural Institute, Hariadi Kartodihardjo, while rehabilitation programs on critical watersheds are needed, the current rehabilitation programs are unfortunately meaningless in that while such rehabilitation efforts are carried out, at the same time regional authorities take exploitative and more massive policies. Such condition is also experienced by several rivers which divide the city of Yogyakarta, namely Winongo, Code, and Gajahwong Rivers. While these three rivers closely relate to the cultural dynamics of Yogyakarta people, the all three watersheds are now experiencing strong pressures from the behaviors of people who ignore the values of environmental sustainability. It turns out that environmental damage does not occur in urban areas only, rural areas in the foot of Mount Merapi have experienced damage due to illegal sand mining that destroy land use, irrigation systems, and water catchments. This indicates that people's perspective, attitudes, and exploitative behavior towards natural resources no longer have to do with rural/urban boundary.

Eco Art is a unification of two words: Ecology and Art, or in Indonesian terms commonly referred to as *seni berwawasan lingkungan* (ecological arts), which seeks to bring back the coherency between human value system and its view of nature. Eco Art is thus comprehensive because it must be so, as it is a result of the awareness that people have no choice but to look at the world in a comprehensive, related, and global way. An integrated space design

is an effort to regain self-awareness as well public awareness that all forms of art creations by our ancestors and elders in the past are endless oceans of arts to be understood, studied and then developed. Traditional arts are real examples of integrated arts, the result of long processes of creations inseparable their from cultural and environmental contexts.

Eco Art is an idea to re-promote local knowledge as a foundation for understanding the importance of ecosystem sustainability. Respect, love, and prudence exemplified by the predecessors in managing the environment have been eroded or even nearly extinct. In this case, what kind of creation concept that can be built to realize an integrated design to accommodate interactions while reviving local community's awareness of their potentials, either in the form of skills or various bamboo plants that grow in their area?

It is in the context of survival *silat* at a form of martial arts can be an alternative for people to foster awareness of their potentials, both in ecological and spiritual terms. Silat is a science with which, through the body, people try to understand their existence of self in relation to nature. Through martial art, people are trained to understand the interrelationships between mind, body, and spirituality, or people often refer to as mind, body and spirit, which in the Taoist concept is called *Sam Po*. *Sam* means three and *Po* means pearl, which means that an individual's actions or behaviors are the results of dynamic and complex interactions of the combinations of reflection, reaction, and action. Since *silat* is much influenced by and from its original area, namely Mainland China, Taoism a relevant concept to uncover the aspects of martial arts spirituality. In the concept of Taoism, nature is analogous to the human body, and the body is considered as a microcosmos, or in Javanese philosophy called *jagad cilik*, which in this context is called the Basics of Landscape Philosophy (*The Tao of Silat*), which consists of nine parts depicted in table 1.

The question is then how to create an Integrated Space Design, as a manifestation of Eco Art by using bamboo plants as the main medium and martial arts spirituality as an inspiration, so as to restore the survival power of local people

both ecologically and spiritually, so that they will reconsider their habits that can harm the environment?

**The Planned Works and the Implementation Methods**

**The Basic Idea of Eco Art**

The basic idea of Eco Art is how to integrate bamboo and *silat* spirituality into an Integrated Space Design, as an aesthetic manifestation of Eco-Art, to create a space of interactions between humans, between humans and their artificial environment, and between humans and nature around their lives, so that they can preserve the survival power of local people both ecologically and spiritually. Silat spirituality serves as an inspiration in this context in that the space design has the quality of human life, a design that has the courage to recognize the spiritual and transcendental dimensions of humans.






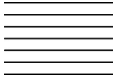


The body of human is a *Tao*, a part of the body of nature, "I am present and flowing (*Tao*),

united in law with nature and subject to a dynamic balance (*Yin Yang*), with all the performance of my mind, body and spirituality (*Sam Po*), existent in space and time (*Su Sie*), in order to understand Thy signs, in deep silence, I process the five elements contained in my body (*Ngo Heng*). Now I am able to reformulate who I am (*Liok Hap*) and move continuously with Thy direction to greet my surroundings. In the desire to capture Thy divine values, I sharpen and refine the seven light waves of my senses (*Jit Sek*), with Thy permission and blessing I join in the web of life (*Pat Kwa*), now I surrender without doubt, if it is Thy will, whatever will be will be. Catastrophe and luck are just the same (*Kiu Tao*). The aforementioned nine Taoist narratives are the order of art installation works realized in the Eco Art Landscape.

**The Idea of Form**

The form of space is associated to all things about relations, namely relations between humans, human relations with the artificial environment, and human relations with nature around their lives.

Table 1. Basics of Landscape Philosophy.

No	Names	Symbols	Meanings
1.	Tao	•	Origin
2.	Yin Yang		Balance
3.	Sam Po		Fusion
4.	Su Sie		Directions
5.	Ngo Heng		Elements
6.	Liok Hap		Fusions + utilizations
7.	Cit Sek		Colors/Senses
8.	Pat Kwa		Pieces/Formulations
9.	Kiu Tao		Catastrophes/Lucks

Source: Notes from the dialogue of Suhu Subur Rahardja and WS. Rendra, 1973

The concept of integrated space design is developed to anticipate these three types of relations. In anticipating the problems that might arise, it is necessary to develop a new paradigm that the design will be a useful knowledge if it is no longer understood merely as an object of use, but as a system, a problem solving system. It should be informed to the public that the design *output* is not only in the form of physical objects as people have understood so far, but also in the form of new activities and behavioral patterns of society.

The idea of artwork is realized in the form of worship place the design of which accommodate different religions in the world because many people assume that people can or allowed to interact with the Creator only in a worship place. The idea of circular line as a symbol of dynamic cyclic movements is often depicted in the form of a sphere, so it makes sense if the roofs of worship places of various religions have a half-ball or dome shape. When you hear the word domelike roof, what comes to your mind might be mosque buildings, while in fact hundreds of years before Islam, Hindus, Buddhists, Christians and Catholics had been familiar with dome shape and used it as part of their architecture.

### The Embodiment Method

This section considers the three stages and the six steps in the process of embodying Integrative Space Design which refers to the creation method presented by Gustami in a book entitled *Proses Penciptaan Seni Kriya* (Craft Artwork Creation Process), with a sub-title *Untaian Metodologi* (Methodological Strands), 2004. The three stages were a) the Exploration Stage, which in this context includes *Pengembaraan Jiwa* (spiritual exploration) and theoretical basis building, b) the Planning Stage, which included the steps of Designing and Model Making or Modeling, and c) the Embodiment Stage which included the steps of making the artworks and evaluating the results according to the purposes and the objectives of the artwork embodiment. Based on the three stages and the six steps, the embodiment method was further elaborated in accordance with the Integrated Space Design context.

#### a. The Exploration Stage

*Pengembaraan Jiwa* (spiritual exploration) as the first step in this context was a struggle phase in which the author was confronted with the reality of environmental damage in an area of Mount Merapi's foot, then examined the phenomenon more closely by extracting information from the local community for behaviors harmful to themselves and the environment where they live in and make a living. The intense interaction between the author and the local community and environment, raised his awareness to understand more deeply about the environmental damage in the study area. To broaden his horizon, the author sought references from various perspectives to answer the question of why environmental damage occurs then identified and formulated the study problem from various issues resulting from local communities' behaviors and practices which are harmful to the environment.

Theoretical basis building as the second step included studying literature references as well as visual references used as analytical materials to find alternative solutions as required. The theoretical basis in this context consisted of theories related to the fields of philosophy, ecology and the environment, forestry, health, art and design. Through literature studies and previous works research, the author could find some interconnections between sciences and between phenomena occurring in the field to be objectively and descriptively projected into a complete and comprehensive picture of the environmental damage phenomenon occurring in Mount Merapi foot area which in turn was used as a conceptual foundation to carry out an analysis to determine the problem approach steps and the solution strategy, which was conceptually the best solution to the problem at hand.

#### b. The Planning Stage

Pre-designing as the third step included the process of transforming ideas from verbal descriptions of the results of analysis into scaled sketches of basic forms of works within the two-dimensional design boundary that still allowed

adjustments or modifications to forms in accordance with the factual conditions in the field. Because this artwork used plants as its medium, this pre-designing was a necessary process for it allowed a space for possible accommodations and changes both in terms of form and dimensions. Because the art landscape is located in Surodadi hamlet and being part of the life of the people in this hamlet, the pre-designing process also included the designing of zonal division.

Designing, as the fourth step, was the process of selecting one of three alternative ideas or idea forms which was then translated poured into scaled engineering drawings along with detailed drawings needed. Since artwork designing consists of two types of planning, namely landscape design and art installation work design, a site plan was needed beforehand to map where the installation artwork was placed in accordance with the narrative the author would like to display.

c. The Embodiment Stage

The process of embodiment as the completion step was carried out in the field and consisted of preparatory work including land cleaning, measurement, and pegging. Once the 'shape sketches' of configuration was found in the field, the next process was digging planting holes following the 'shape sketches', then followed by planting bamboo plants as planned at the location where the works were made. This was followed by shaping work, namely arranging the bamboo plants as planned, followed with maintenance works, namely maintaining the shape and controlling the growth of the bamboo plants.

Since the artwork was made using bamboo plant as the medium, maintenance works were needed to control the plant growth and prevent the shape from being deformed which would decrease the artwork's function. This work resembled the process of making model or modeling in that if the model is made with a 1:50 scale, for example, then the actual work use a 1:1 scale.

The sixth step was assessment or evaluation of the results of the embodiment. The aim of

this activity was to know the fitness of the idea to the results of the embodiment. This step, according to Gustami, includes testing various aspects, both textually and contextually. Gustami further explained that, for artworks that have practical function, the evaluation should be done based on functional work criteria and analytical criteria, including the possibility of developing an exhibition to get responses from the user community. The evaluation is meant to criticize the quality of work that involves physical and non-physical aspects, including personal, social, and cultural functions. Once the functional work criteria have been met, the work is ready to produce and release to the public. However, since the Integrated Space Design is an ecological artwork, that is, an artwork that aims to answer the problem of environmental damage in an area, then this artwork cannot be duplicated without considering ecological and environmental aspects, including the socio-cultural aspects of the local community.

### **The Objectives and the Benefits of the Integrated Space Design**

#### **The Objectives of Eco Art**

Like meditation, *Ilmu Silat* is an exercise to reach serenity, but in *silat* terms serenity is achieved through motion. In meditation, serenity and activity, stillness and motion are interrelated, even though in natural physics these two sides are opposite to each other. When someone is practicing martial art, he/she is interacting with his body to find serenity. Two things will be achieved in *Silat*. Firstly, by moving, a person processes his/her body to activate all organs to enable them metabolize perfectly which in turn their vitality is maintained, and, secondly, by moving rhythmically he/she finds calmness, or in the meditation term called serenity. When a person is moving rhythmically to reach serenity phase, he is connected to the vital energy in his/her body. This energy is usually called *Chi*, the divine energy which is connected through breathing to the *Chi* of nature. *Silat* is an ancient method used by people to improve the quality of their spiritual consciousness.

Today there are so many materials to choose and of course they can contribute significantly if their nature is recognized. Ignorance of that would only put people into articulative confusion from considering bamboo simply as countrified and cheap material. The mistake of seeing bamboo may lead to mistreatment of bamboo. Bamboo must be seen as a whole, that it is grown by Nature with all its advantages and disadvantages. Bamboo is commonly judged only based on material aspects of its physical use and rarely seen as something alive and valuable. From time to time Bamboo plants experience and record events and phenomena unknown to humans, because humans are trapped in an anthropocentric worldview, and interpret the world subjectively according to their five senses.

Borrowing *silat* terms, is it bamboo skin that forms a cavity that makes bamboo stem has a pipe-like shape or is it the cavity that forms the skin? People's minds will generally be trapped in the "or" dichotomy so they have to choose one of the answers. It takes courage not to choose one of these choices, but integrates the two instead, in this case the cavity and the skin form each other. Likewise, human's body and spirituality form each other. A body which is alienated from its spiritual values will damage its sensory sensitivity which will ultimately alienate the body from knowledge. The created artwork, Eco Art, is a portrayal or a description of the human body, including the spirituality contained in it, manifested in the form of an art installation work using bamboo plants as the medium, which was then narrated.

### **The Benefit of the Integrated Space Design**

The benefits from the Integrated Space Design as a manifestation of Eco Art was an increased awareness in the part of the author that the body with all its elements is inseparable part of the web of the life of local people, the artificial environment, and the nature in which the author lives and makes a living.

Cangkringan is the place where Eco Art absorbed information and gathered knowledge so that when it was eventually realized, its existence provides an additional space for local people to exchange with each other information, knowledge,

and cultural values contained which in turn allow them to see more clearly that the land and the plants growing on it are blessings from nature, entrusted legacy that must be protected and preserved for the generations to come. In addition, Eco Art can also inspire local children and local youth to be more confident and united in protecting their cultural values.

Eco Art is an ecological art. It is organic, integrated to people's lives and participates in coloring it. It does not create a stage for itself, but for the local community to express their perturbations. Because it is organic then it is beyond ecological and environmental disciplines, forestry (of bamboo plants), and martial art (*Silat*)

*Integrated Space Design* as the aesthetic manifestation of Eco Art, is a system for solving environmental problems in the foot area of Mount Merapi in the form of new activities and behavioral patterns in the society by advocating people to change their perspective by respecting the web of life. Since it is local in nature, it is typical of this particular area and thus it may not be duplicable or applicable to other areas.

*Eco Art* as a museum, a laboratory, or a station for ecological art development can be used as an alternative studio for students, lecturers, and the Higher Education Institution of the Indonesian Institute of Arts Postgraduate Program in Yogyakarta to do various activities both in terms of interdisciplinary studies and development and community services.

Ecological art is an art genre and artistic practice that seeks to preserve, remediate and/or vitalize the life forms, resources and ecology of Earth, by applying the principles of ecosystems to living species and their habitats throughout the lithosphere, atmosphere, biosphere, and hydrosphere, including wilderness, rural, suburban and urban locations. It is a distinct genre from Environmental art in that it involves functional ecological systems-restoration, as well as socially engaged, activist, community-based interventions. Ecological art also addresses politics, culture, economics, ethics and aesthetics as they impact the conditions of ecosystems. Ecological art practitioners include artists, scientists, philosophers and activists who often

collaborate on restoration, remediation and public awareness projects. Artists considered to be working within this field subscribe to one or more of the following principles: *Focus* on the web of interrelationships in our environment—on the physical, biological, cultural, political, and historical aspects of ecological systems; *Create* works that employ natural materials or engage with environmental forces such as wind, water, or sunlight; *Reclaim*, restore, and remediate damaged environments; *In-form* the public about ecological dynamics and the environmental problems we face; *Revise* ecological relationships, creatively proposing new possibilities for coexistence, sustainability, and healing. (Wikipedia Contributor. 'Ecological Art.' *Wikipedia The Free Encyclopedia*).

Three important things underlie and become the direction of the creation of Eco Art, which are in accordance with the opinion of scientists about the importance of integration or reunification of people's perspectives in addressing information, knowledge and cultural values. Henryk Skolimowski's critical assertion in his book *Eco Philosophy: Designing New Tactics for Living*, (London, 1981) which has been translated into Bahasa Indonesia as *Filsafat Lingkungan, Merancang Taktik Baru untuk Menjalani Kehidupan* by Penerbit Bentang Budaya, (Yogyakarta, 2004) provide a strong rationale for analyzing environmental damage problems in various sectors of life and then finding the ways to ameliorate peoples' perspectives in order to improve their quality of life by changing behaviors harmful to the environment, both ecologically and spiritually, because quality is so simple, close, and direct.

### **An Integrated Space Design**

Design is inseparable from theory and practice. Skolimowski (2004: 122) pointed out that theory and practice are closely related, and Immanuel Kant said that a theory without practice is powerless and practice without theory is blind. Many of our current practices are blind because they are not guided by theory or do not rely on viable theories. Architecture builds a bridge between logos and praxis; it is the point where these two meet.

This view provides knowledge to people that the planning and the construction of buildings or regions need to understand theories that support the preservation of the web of life, without which people will only produce planning and development failures which can eventually lead to recurring environmental disasters. Integrating theory and practice is the first step to prevent violence against the web of life as human cultural and spiritual heritage.

There is a close relationship between architecture and culture in that, in general, architecture is the dominant function of culture on the one hand, while on the other hand architecture significantly expresses and/or helps define the meaning of culture. Skolimowski (2004: 127) who argues about the existence of the architectural dogma 'Form Follows Function' in the twentieth century triggered by sculptor Horatio Greenough who is better known as Louis Sullivan says that when functions are limited to economical physical parameters, forms are produced by force. With the ability to see what must be done after an event occurred, people can now suggest a far more adequate architecture characterization, namely *form follows culture*. Alternatively, we can say that *the skin represents the soul*, or even *the skin holds the soul*.

The concept of space according to Skolimowski (2004: 129) can easily be understood but is very difficult to express. Needless to say that an architectural space, a space created when building human habitat, when interacting in it in a variety of humane ways, is different from mere physical space, but in fact many people have been forced to design spaces that only recognize area and volume without recognizing quality and other non-physical properties. Environmental and social catastrophes occur today have been because people uncritically accept technological space as the basis for designing what they would like to do. While the boundaries of technological space are evident to anyone willing to stop to reflect on their characteristics, only recently have people permitted themselves to such luxurious contemplation. As a result, people have reintroduced architectural language about other aspects of human space: the social, psychological, and aesthetic aspects.

Quality of life as a product of one's interaction with his/her environment according to Skolimowski (2004: 131) is not enabled in the sterile geometric spaces of modern architecture. Life doesn't like to be put in a box. Life prefers formless, varied spaces. The biological legacy of humans is more adaptable to irregular and circular angles or slits than linear geometry. In real experience people find linear cities and other habitats which show that the geometric planning principle does not promote quality of life, because they commit violence on the biological legacy of humans, to the formless and irregular things that exist within humans, which are the ingredients of all organic life.

Skolimowski (2004: 135) praises architectures that have a quality of life, those kinds of architectures that have the courage to recognize the spiritual and transcendental dimensions of humans. Quality resides in a space that is free, purposeful, and endowed with transphysical characteristics and characters. In summary, the true purpose of architecture is sustaining, improving the quality, and celebrating life. The phrase "continuing, improving the quality and celebrating life" must be seen in the appropriate context. In addition to ecological awareness, people need to have a coherent conception of humans and an enduring cultural model which is able to sustain human life in the long run. You cannot have an environment with a life quality when human works are systematically reduced to boring, mechanical, repetitive tasks.

### **Ecoliteray and Ecodesign**

Ecological sustainability is an essential part of the fundamental values in the re-establishment of globalization. Creating a sustainable society is a big challenge. In this section Fritjof Capra (2004) explained in detail the steps and efforts to build a sustainable society, i.e. making the community 'ecologically literate'

Capra (2004: 250) explains that the key to an operational definition of ecological sustainability is the awareness that we do not need to create sustainable human societies from zero; we can replicate natural ecosystems which consist of sustainable communities of plants, animals, and

micro-organisms. Because the salient characteristic of the Earth's household is its inherent ability to support life, then a sustainable human society is a society that is designed in such a way that their way of life, business, economy, physical structure, and technology do not interfere with the inherent ability of nature to support life. Sustainability does not necessarily mean that everything is stable, does not change. It is a dynamic coevolution process rather than a static state. Capra's (2004: 252) operational definition of sustainability indirectly states that the first step in an effort to build a sustainable society is to make the community 'ecologically literate,' understanding the organizational rules of all living systems. Specifically, there are six ecological principles that are important to sustain life, namely: web, cycle, solar energy, partnership, diversity, and dynamic balance. Furthermore Capra (2004: 252) says that these principles directly related to health and wellbeing in that our health depends on the purity of the air we breathe and the water we drink, and the health of the soil that produces food.

Design in the broadest sense, according to Capra (2004: 254), forms a flow of energy and materials for human purposes. Ecodesign is a process in which goals are thoughtfully connected through larger patterns in the natural world. In the words of a scholarly author Janine Benyus, ecodesign 'introduces an era that is not based on what we can take from nature, but on what we can learn from nature'.

Nature, including human nature, is an organism, and an organism is an orderly system of anarchy. Eventhough there is no 'boss' in it, nature can keep going in harmony even if it is let to run just the way it is. This is what is called *Tao*, or *Jagad* (the universe) in Javanese language which is then developed into *Nggelar Nggulung Ngelar Jagad*, consisting of nine steps which imply studying, understanding, and developing the potential of the human body according to its nature. However, instead of reflecting harmony, the form of the works as a whole reflects diharmony of *Jagad* (the universe) as a result of the splits in people's views of damage phenomena occurring in almost all lines of life. The nine works realized in the area of Art Landscape were visualizations of the



basic philosophy of the landscape. It is a portrayal, depiction, embodiment, or representation of the spirituality of the human body, including *Tao*, *Im Yang*, *Sam Po*, *Su Sie*, *Ngo Heng*, *Liok Hap*, *Jit Sek*, *Pat Kwa* and *Kiu Tao*.

The title of the first installation work was *Tao*, see Figure 1, the shape of which resembles the dome of a Sanchi stupa, a half-spherical worship building made of bricks built on Buddhist relics. This first *Tao* likens the body of a new born, who is innocent, honest, and pure. Because the brain is not yet 'active' in responding to various events, the body with all its instruments is so natural in receiving stimuli from its surroundings. Therefore, the title of this particular *Tao*'s artwork became 'reBorn.' To make it more easily digested by the local community the title was transformed into 'Orok,' which is another name for 'Jabang Bayi' (newborn baby), the developmental period of which, according to psychologists, is the shortest along the human life.

The second work was called *Im-Yang*, see Figure 2, the shape of which resembles the roof of the Pohsarang Church building in Kediri, which looks like an upside down boat which is split or divided into two parts. The actual function of this work is a performance room with a capacity of 50 audiences. *Im-Yang* is a pair of realities that inevitably have to be accepted as part of life. Therefore the title the *Im-Yang*'s art creation was transformed into 'Split Off', meaning that people are trapped in a dichotomy of mind dualism that makes spirituality alienated from the body. However, like the local naming of a specific plant, this work was named with something which is easily accepted by the local community,

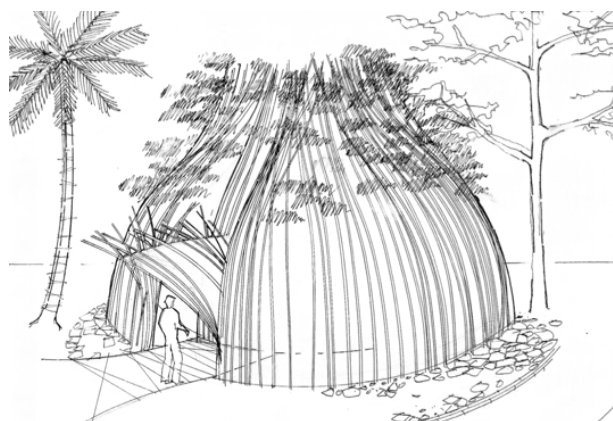


Figure 1. The Perspective of *Tao/Orok*.

'*Sigar Penggalih*', Javanese words which mean the splitting of the unity of view between the mind and human spirituality as partners.

Figure 3 shows the third work titled *Sam Po*, the shape of which resembles a Pagoda tower. In the artwork context, *Sam Po* describes the human body which is a fusion of three elements: mind, body, and spirituality, and therefore humans have consciousness. In the context of *silat*, the tower is a symbol of gallantry, a unified body structure that is upright, strong and sturdy, but the deterioration in the tower's function inspired the naming of this particular *Sam Po* artwork, 'Drunken Tower', a tower which is drunk or losing some of his consciousness, which in the local language is called 'mendem'. The term 'mendem' implies several meanings, among which is excessive euphoria or 'mabuk kepayang' which in local terms is commonly referred to as 'mendem kahanan', being drunk while still conscious. Another meaning of the word "mendem" is loss of consciousness, forgetfulness, infatuation or excessive lust, and therefore the title "Drunken Tower" was transformed into local terms "Mendem Kahanan."

Figure 4 shows the fourth work titled *Su Sie* the shape of which resembles the dome of the Sakirin Mosque in Istanbul, Turkey. This space serves as the connector to other spaces around it. This particular work functionally relates to the function of the first work. While *Tao/reBorn/Orok* serves as performance room, *Su Sie* serves as a mediating space, a space for dialogues between audience and artists, or musicians. In the context of art creation, *Su Sie* is described as four directions, or four angles, describing the position of man

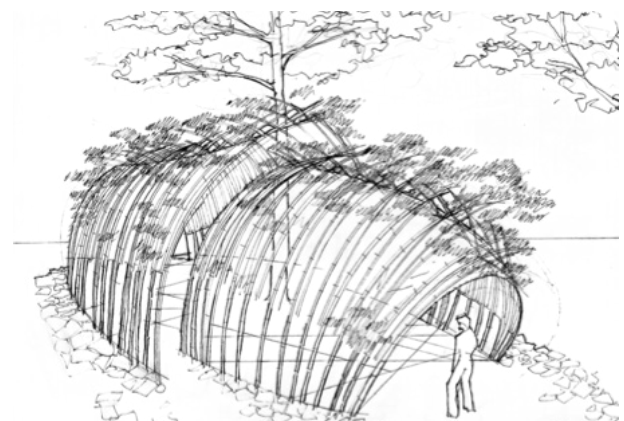


Figure 2. The Perspective of *Im Yang/Sigar Penggalih*.

on Earth. Having orientations, being in space and time, life is influenced by and influences the environment. In the reality of life, every individual should accept that he/she has body, mind, feelings, and desires. However, orientation, space and time are never wrong. It is humans that sometimes misplace themselves. There for the title of *Su Sie* artwork was changed into 'off Side'. In Javanese terms, this particular work was named 'Suwung', a nickname given to a dazed individual who is jobless, is daydreaming, and confused from lacking of orientations and purposes.

Figure 5 shows *Ngo Heng*, the fifth artwork, the shape of which resembles one of hollow stupas with a Buddha statue in it that surround the large stupa of Borobudur Temple. In the context of the art creation, the stupa was turned upside down, making it not conical upward instead of downward. *Ngo Heng* in the context of silat is a metabolic process of five elements or five main organs of the human body involved in the digestive process of food resulting from plant photosynthesis. The meaning to be conveyed by this particular work was that even when that perfect metabolism produces 'vital energy' which is commonly called *Chi*, if it is

not properly guided to touch the point of human spirituality consciousness, this 'vital energy' will not go anywhere but to the genitalia. Therefore the title of *Ngo Heng* art creation was transformed into 'Suffering Return'. This particular work was meant wants to represent the return of human suffering due to their lame ability to control the 5 (five) zests inherent in the body, which in Javanese philosophy is called *mo limo*. The origin of the term *molimo* is *Moh* (do not want) *Limo* (five), do not want to engage in five misconducts, including *mendem* (drinking), *main* (gambling), *madon* (promisquous sexual behavior), *madat* (drug addicted), *maling* (stealing). Therefore, the title of this particular work was transformed into 'Mo Limo'.

Figure 6 shows the sixth artwork named *Liok Hap* which consists of 'three fusion' and 'three uses', the phase where an individual must start moving all his/her body elements to interact personally and stay in touch with all forms of the web of life. *Liok Hap* is a gate that resembles an archeological artifact of the Majapahit kingdom called the *Wringin Lawang* gate in Mojokerto. In the context of art creation, while *gapura* (gate) is commonly interpreted as the getaway to an area,

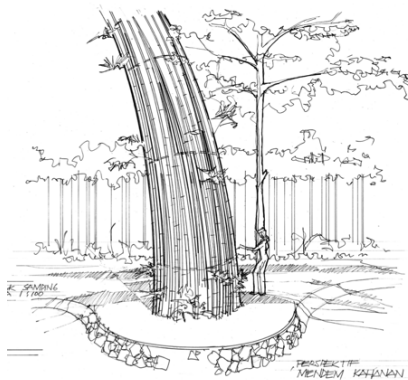


Figure 3. The Perspective of *Sam Po/Mendem Kahana*.

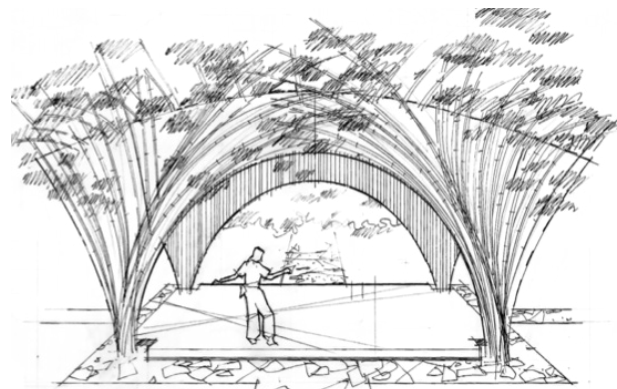


Figure 4. The Perspective of *Su Sie/Suwung*.

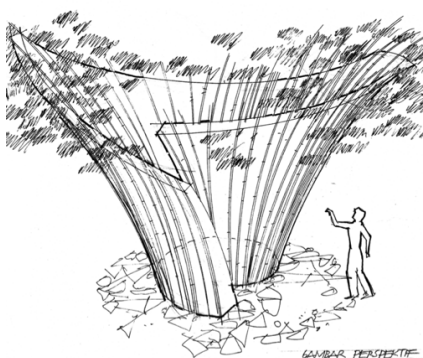


Figure 5. The Perspective of *Ngo Heng/Mo Limo*.

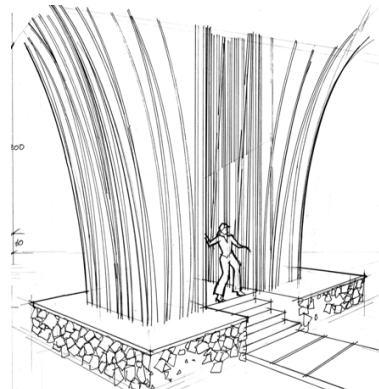


Figure 6. The Perspective of *Liok Hap/Lawang Awangen*.

or the entrance gate to royal complex, *Liok Hap* artwork is the gateway to the idea of starting a new chapter of life, to read reality, capture information, and 'digest' them so as to become knowledge that leads to behavior changes. *Liok Hap* is the process of transforming the mind into implementation, but because the gate of mind sometimes stands too 'gloriously', it is too often that an idea is pondered and embodied but not successfully brought to implementation. Therefore *Liok Hap* was then named 'Mind Gate', which in local terms was called '*Lawang Awangen*', which is a combination of two Javanese words *lawang* which means door and *awang-awangen* which means refrain from doing something because of reluctance, doubt, or fear of failure.

*Jit Sek* was the title of the seventh artwork, see figure 7, which means seven colors or seven senses, or seven *chakras* which in the Hindu concept are understood as the centers of metaphysical and/or bioplasmic energy in the human body. It is called *bio* because it lives, and *plasmic* comes from the word *plasma* to refer to the fourth ingredient in the formation of a physical element, in addition to solid, liquid, and gas. It is the bioplasmic body shape that appears to the surface of the human physical body, which is then called the *aura*, the emission of energy in the form of subtle color radiation that surrounds living things. Because this *Jit Sek* art work was embodied outside the Art Landscape site, the embodiment of the work was adjusted as a positive result of the interaction with the web of human life in the Surodadi hamlet environment. The idea of this particular shape symbolizes the seven elements of life reflected in the *chakras*, namely thought, light, ether, air, fire, water,

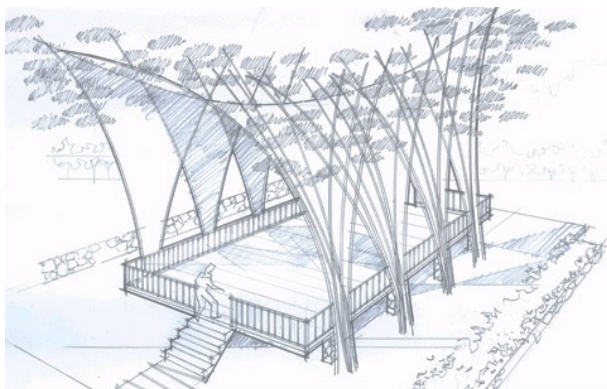


Figure 7. The Perspective of *Jit Sek/Eko Warno*.

and earth. However, because uniformity controls all lines of life, the *chakras* are no longer colored, and *Jit Sek* also changed to 'Monochrome', which in Javanese terms is called *Ekowarno*.

The eighth work was named *Pat Kwa*, see picture 8, which represents eight pieces or slices. It is also oftenly symbolized as a web of spider or web of Nature, which in the concept of *silat* consists of sky web, earth web, and human web. But in the context of Eco Art, the tenacity of the web lies in its knots, because it is the knots that make the lines intersect to form web, the slices become web. *Pat Kwa* does not come from humans, but it is usable, it exists in the cosmos and is connected to humans. The problem is that it can only be recognized, absorbed, and felt. Without spirituality, the fine webs of life will remain hidden behind the mist of the human mind. Therefore, the work of *Pat Kwa* resembles a suspension bridge made of bamboo, from an artwork of one bamboo clump to another, but the bridge is not knotted so that it is not connected to one another. In other words, it looks connected but not tied to each other. Through this particular artwork, *Pat Kwa* would say that humans are no longer connected to the web of life so they have difficulty absorbing latent information in the nature. As a result, people have difficulty adapting to change. Therefore the title of *Pat Kwa* artwork was changed into '*Disconnected*', which in Javanese word called *pedhot* (disconnected) or *pegat* (separated). The artwork name was then adjusted to '*Megat Jagad Alus*' (disconnected from the web of life).

*Kiu Tao* represents the circle of human life where disaster and luck is just the same, depending on how humans formulate them in training

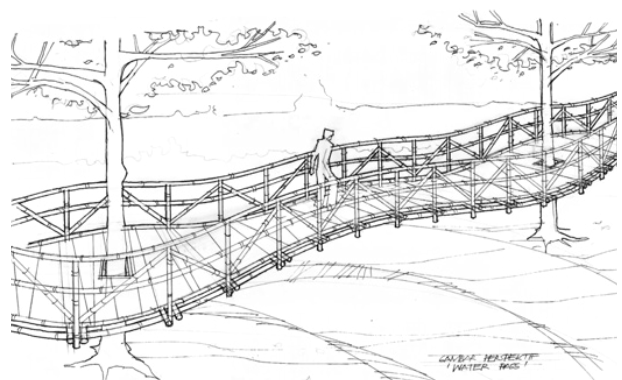


Figure 8. The Perspective of *Pat Kwa/Megat Jagad Alus*.

themselves to become virtuous beings. The title of the ninth artwork symbolizes the totality of human undoing one's life in accordance with the decisions he/she has taken. An individual can take a step back when facing a problem to see the eight corners of alternative solutions he/she can choose, formulate, and execute, then the disaster would turn into luck because it is formulated. In the context of art creation, *Kiu Tao* is the arrangement of the entire art landscape which consists of land with plants, buildings, and the artwork themed *'Nggelar Nggulung Ngelar Jagad'* which grows on it. The artwork is in the form of landscape decorated with overlay of textured and colored horizontal ornaments made of grass. It invites people to enter the universe of grass, one of important plants in the web of the local community. Grass survives and keep growing despite being 'cleaned up' when people welcome the independence day of Indonesia, or sprayed with herbicides when they become troublesome weeds, or smeared with plastic mulch to prevent them from growing. Inspired by this phenomenon, *Kiu Tao* was transformed into 'Innocence', then adjusted to the local language *'Pathok Bangkron'*, which meant 'refusing to change', firmly defending an opinion even though the opinion he/she believes is not necessarily true.

*Nggelar Nggulung Ngelar Jagad* in this context aligns itself with nature in an effort to solve ecological balance problem in order to touch the sensitivity that organisms in the web of life are more 'we' rather than 'me' in nature. Nature, including the human realm, is an organism, and an organism is an orderly system of anarchy. Nature can keep going in harmony even if it is let to run just the way it is. Art Landscape is an ecological artwork which contains three aspects, namely (1) function aspect, which is judged based on its ability to accommodate human activities in carrying out their body activities to understand human relations, (2) role aspect, which is judged based on its abilities to build relationship between humans and their artificial environment, and (3) meaning aspect, which is judged by its ability to interpret the relationship between humans and nature around their lives.

## The Function Aspect of Space

The Art Landscape is a place or space for the interactions of various groups of people or communities, including *silat*, art, peasant, bamboo, and surrounding communities. In addition, the Art Landscape has often been used by students from various Higher Education Institutions to carry out training, discussions, and/or just sharing. Art and cultural communities such as Sawung Jabo Music group with its Barock Circus, Teater Dinasti, Teater Garasi, Teater Gajah Mada, and Omah Panggung Nitiprayan, either in groups or individually have used the space to practice music or even theater, perform general rehearsal before the actual performance, or carry out discussion activities, program evaluations, retreats or informal gathering. The local community group uses it as a regular practice site for the *Macapatan* and *Cokekan* traditions.

Bamboo plants existence has been the strongest reason why most of the Art Landscape users choose this site as an interaction space, especially when people know, despite limitedly, that Eco Art is gradually showing its real shape. Some people begin to be 'intrigued' to feel the atmosphere of the space and feel provoked to comment on the *Nggelar Nggulung Ngelar Jagad'* artwork. The questions often arising from most people have been why it uses bamboo plants and what the connection it has with *silat* spirituality, and the final question is how to use this space when the rainy season arrives

The questions arising from cultural circles include what the Art Landscape is used for, and to what extent its usefulness to the local community. Another interesting question from the local community is whether they can take the grass growing well in the Landscape Art to feed their livestock. In general people assume that the artwork is not beneficial to them because aside from making bamboo plants bent, the bamboo species used to make the artwork do not sell well in the market, so it does not provide direct benefits economically.

The most prominent human interaction with nature where people make a living was seen when the bamboo plants were formed into artworks and space, 'luxuries' that cannot be found elsewhere.

Watching bamboo plants become a living building structure that continually refines its shape is a show in itself. *Nggelar Nggulung Ngelar Jagad* is a synthesis of bamboo plants and *silat* spirituality, it is the aesthetic manifestation of Eco Art that makes bamboo plants not only serve as the material to realize the artwork, but also as the medium, or the delegation of nature that need to be studied, understood, and comprehended as the web of life. While *silat* spirituality is a microscope on the one hand, and a telescope on the other that can be used to understand the web of life and the interconnections between cosmos, in the end the space serves as a bridge that reconnects humans, humans and their artificial environment, and humans and nature .

The *Integrated Space Design* is not a design intended for people who just want to enjoy short-term benefits, without taking into account the survival of their generation and the generations to come, or people who only want to multiply capital, because the designing in this context is not just a work of designing a building, but designing a space to awaken people from their long 'unconscious state.' Given the many kinds of disintegration problems in the reality of human life that cause damage to the whole elements of life, the *Integrated Space Design* is a space design that integrates what have been scattered by quantifications of science, knowledge and human life. Space in the context of Eco Art is a vessel, a bridge of interaction, or a point where logos and praxis meet and interact to improve the quality of life.

Art Landscape is the place where the author undergoes the process of understanding, comprehending, and offering an answer when the phenomenon of climate change commonly referred to as 'global warming' begins to have an impact on the lives of local communities, who still rely on farming culture to survive to date. Today the local community must accept the fact that the supporting capacity of the natural environment starts to weaken, as indicated by dozens of springs that stop flowing, wells water level drops as deep as two meters, and the rainy season and the dry season are no longer match the *Pranoto Mongso* the results of which is the shrinking of water availability, both

in quantity and quality. The threat is even more evident including crop failure which leads to failure to adapt to changes, while the escalation of illegal sand mining in local residents' lands has not shown signs of declining.

## Conclusions

The general conclusion of the *Integrated Space Design* as an aesthetic manifestation of Eco Art is that it succeeded in presenting *Nggelar Nggulung Ngelar Jagad*-themed artwork with accompanying installation works growing in it, using bamboo plants as the main medium, and *silat* spirituality as the inspiration. In accordance with the purpose and objectives, the art landscape is created to carry out its role as a space, a vessel or a bridge of interactions between humans, between humans and their artificial environment, and between humans and nature around their lives. Today the presence of the art landscape in the region is starting to get positive responses from the local community. This is indicated by the emerging collective idea to restore the function of the land formerly used for sand mining in accordance with its designation. This is where the *Integrated Space Design* can serve as an alternative solution to transform the critical land into a conservation land. Therefore, illegal mining must be stopped, which also means stopping activities that can harm the environment to prevent further losses in the future from the damage. If illegal mining is not stopped gradually, then the program is only a kind of digging a hole to close another hole in the real sense, which in the end will leave debt to be paid by the generations to come.

From the function aspect, the *Integrated Space Design* has been demonstrated as being able to accommodate inter-human interaction activities when several *silat*, art, bamboo, and environmentalists communities held physical activities in the forms of exercise, informal gathering, workshops, discussions, refearsals for performances, or recreational activities, in addition to students from various higher education institutions which held similar activities in the Art Landscape. Meanwhile, young people from the

local community together with students from the Faculty of Psychology, Yogyakarta State University often used this space as a place for practicing outbound activities and child games or commonly called by local community as *Dolanan anak*.

From the role aspect, the Integrated Space Design has been demonstrated as being able to accommodate human interaction with the artificial environment when journalists, cultural observers, education and environment activists, both from local, national and international levels positively appreciated the living, organic space and artwork that use bamboo plants which full of cultural values as the medium. Bamboo plants which were considered as *gendruwo* (ghosts) nests by the local community and used as hiding places for criminal gangs are now gradually respected and treated as a glorified plant. In addition, the landscaping with the composition of building structures and the installation artworks growing on it serves as erosion controller, soil nutrient blanket or protector and water catchment area.

From the meaning aspect, the Integrated Space Design has been demonstrated as being able to become a bridge of human interaction with nature around their lives when artists, cultural observers, and international martial art communities seemed to be connected with the web of nature, they seemed waiting and wondering what the end result of this work that can be shared with the local community. It seemed they share the same concerns of people's behavior towards nature, and that bamboo as a medium or 'antenna' works perfectly to unite them in the same space and time. *Nggelar Nggulung Ngelar Jagad* is a narrative of *silat* spirituality that is driven into implementation, to become tangible and spatial narratives in the form of an integrated space design that is born, grows together and unites with the community life, culture and surrounding nature.

Another thing that was also important, a support factor that enabled the embodiment of the Integrated Space Design as an aesthetic manifestation of Eco Art, was when the artworks which used bamboo plants as the main medium and *silat* spirituality as a source of inspiration got the opportunity to be studied and developed into

a dissertation subject. Such opportunity would allow people to learn how to 'refine' their spiritual experiences when greeting and 'dialogueing' with other living things called 'plants', because they grow around us, we even inhale the oxygen they produce and consume them to provide our bodies with important energy and nutrient as the basic ingredient of the arising spirituality itself.

Another supporting factor was the possibility to reintegrate the specialized art science into Eco Art, so that students do not have to depart either from a box called applied art or pure art for it would be like separating interrelated knowledge from one another, separating *Im* and *Yang*, separating men from women, separating the right brain from the left, separating theory from practice, separating ideology from art, which at the end will separate quantity and quality of life. Because such perspective contributes to environmental damage throughout the world, it is in the context of Eco Art creation the author gets the opportunity to reconcile one another, to integrate dualism in people's bodies which causes the symptoms of 'schizophrenia' to appear in all elements of life.

There were inhibiting and supporting factors that technically arose due to the use of bamboo plants as the artwork media. Since it used bamboo plant as the media, the embodiment of the work required a longer period of time to complete, but the length of the time for realizing the artwork was also beneficial, or in other words it was a supporting factor, because it provided the author more time for recording more events from various perspectives of life shown by bamboo plants, both in terms of quantity and quality. As shown by *Su-Sie* artwork which was then called '*off Side*', then integrated into *Suwung*, space is indeed inseparable from time.

Ecological art education can be an alternative to improve the ability of local community's ability to read, absorb, and understand the information displayed by bamboo plants regardless of their species and family, then mimic the patterns and the ways the bamboo plants preserve themselves. Such activities are useful to foster new awareness considering that many people only understand the price but do not realize the value, understand the profit but do not realize the benefits, so that

it becomes important to integrate ecoliteration-ecodesign into the lives of local communities in the Surodadi Hamlet area.

Ecoliteration and ecodesign have been developed in universities in various developed countries the purpose of which is to change the way people think they so that they will be willing to imitate the way the web of life preserves its survival. Taking waste from one organism becomes the raw material for the lives of other organisms as an example, we should not see rubbish as waste that must be disposed, but as new raw material for creating new products. Although this has been exemplified by our predecessors in the concept of farming culture according to which people plant various types of plants so that they can be harvested alternately according to the season; some of the products are consumed, some stored for seed reserves, and some to feed livestock which in turn produce soil fertilizers, a cycle that enables a pattern called the web of life. In the context of the Integrated Space Design, individuals, communities, or institutions that come to the site are seen as parts of a web of life that provides benefits for the survival of the Art Landscape area, be it energy, material, information or knowledge. Therefore, an improved quality of life perspective is needed to enable people see a more complete picture of the interconnectedness of the web of life.

In addition, ecodesign can make contribution by offering alternative concepts for the local community through designing bamboo products while the plants are still alive/growing and educating the local community to become craftsmen of bamboo houses with with arched roofs resembling '*lumbung*' (barns) in Lombok and Bali, for examples. By designing based on 'production chains' principle, all stages can be done by several different groups, starting with the group of bamboo farmers who control the growth of bamboo plants, harvest or cut the bamboo plants at "the best time", i.e. when the bamboos plants are mature enough and the levels of water and glucose are low. The following group can do the works of selecting, sorting, and preserving bamboo either to become building material or ready-to-use furniture material in accordance with their designations. The cutting

and the assembling of various parts are done by the subsequent group to produce various items such as '*bale-bale*' (benches), gazebos, or even bungalows. There may be no raw material left, because quality bamboo material can be used up to the smallest pieces for making furniture, interior elements, child toys, musical instruments, to accessories.

It is suggested to people who will use plants as a medium to create some work to equip themselves with adequate knowledge of the plants they will use, where they grow and how they become part of the cultural life of the local community. Such knowledge is derived from long experience with a type of plant that has become knowledge passed down through generations. The planting media and the plants must be prepared in advance. Through these preparatory steps, people will better understand the soil or the planting media needed as nutrition supply for the plants the artists will use to realize a work. Alternatively, it is the plants that provide information and knowledge to the artists so that they understand the type of planting media needed by the plants to grow as expected. In this way, the artists will be able to calculate the speed of growth of the plants against the time available to complete their studies. Because the work will always be related to human life, it is necessary to work together with people from other disciplines, as partners or counterparts to help the artists obtain information and knowledge related to soil elements such as microorganisms and other knowledge related to habitats where a type of plant typically lives and develops.

Agencies or higher education institutions need to consider providing laboratories or establish cooperation with various disciplines' laboratories to enable students to conduct research or observations to obtain broader and deeper information and knowledge about various natural phenomena. Through institutional collaborations and by using instruments with accountable accuracies, data or information can be objectively approached either numerically or visually, despite the fact that all these instruments will not guarantee that someone will become more creative.

The Ecological Art Landscape in Surodadi Hamlet area began to show success when some of

local people responded positively to its existence and subsequently invited the author to join in designing and realizing works similar or related to Eco Art at the former location of sand mining to create a creative, recreational and educational space for the community, both local people and the wider society. Now the Art Landscape Art has been accepted by local people as part of the web of life and has the opportunity to contribute by creating new spaces with life quality.

In this 'case', Art Landscaping and the installation artworks in are 'demanded' or 'cursed' by nature to really carry out their functions, roles, and meanings. Although the Memorandum of Understanding on the Conservation of Former Sand Mining Site in Surodadi Hamlet has not been formally signed by the parties involved, this information suggests that bamboo plants truly have their own mission, then with their beauty and amazing growth speed, bamboo colonies display their beautiful 'dance' to the community, and for the umpteenth time the artwork made the author aware that *'with your limited senses and knowledge, how could you understand my character?'*

### Acknowledgement

I would like to thank to my promotor and co promotor, Profesor Gustami, SU, and Profesor M. Dwi Marianto MFA. Ph. D. for providing enough time to see, reflect on, and understand the possibilities and interconnectedness of different sciences. The authour would like to express his highest appreciation to Guru Besar Persatuan Gerak Badan (PGB) Bangau Putih, Gunawan Rahardja, for opening the door to the author to learn about *the Tao of Silat* practice which enabled him to accept the natural life of a *silat* practitioner. The author would like to thank Dr. St. Sunardi and Dr. Suastiwi, M. Des for the willingness to guide and assist the author in dismantling and reconstructing his mind which enabled him to arrange the experience of practicing silat and associating with bamboo plants into a 'readible' dissertation of artwork creation. I would like to express his gratitude to Dr. Dwinita Larasati, MA, for kindly enriching and strengthening the

significance of this dissertation by offering positive inputs, particularly theories related to Eco Art, Ecology, and Environment.

### References

- Alexandersson, Olof. (1995). *Living Water: Victor Schauberg and the Secrets of Natural Energy*. Bath, UK: Gateway Books.
- Barlow, Maude dan Tony Clarke. (2002). *Blue Gold: The Battle Against Corporate Theft of the World's Water atau Blue Gold: Perampasan dan Komersialisasi Sumber Daya Air*, terjemahan Nila Ardhani 2005. Jakarta: Gramedia Pustaka.
- Budihardjo, Eko. (1983). *Menuju Arsitektur Indonesia*. Bandung: Penerbit Alumni.
- Budihardjo, Eko. (1997). *Arsitek Bicara Tentang Arsitektur Indonesia*. Bandung: Penerbit Alumni.
- Budihardjo, Eko & Djoko Sujarto. (2005). *Kota Berkelanjutan*. Bandung: Penerbit Alumni.
- Capra, Fritjof. (1999). *Menyatu dengan Semesta: Menyingkap Batas Antara Sains dan Spiritualitas*. Yogyakarta: Fajar Pustaka Baru.
- Capra, Fritjof. (1999). *The Tao of Physics: An Exploration of the Parralels between Modern Physics and Easter Mysticism atau Menyingkap Paralelisme Fisika Modern dan Mistisisme Timur*. Terjemahan Auliyah Ilhamal Hafizh. (2000). Yogyakarta: Penerbit Jalasutra.
- Capra, Fritjof. (2002). *The Hidden Connections, atau Strategi Sistemik Melawan Kapitalisme Baru*, terjemahan Andya Primanda, (2004). Yogyakarta: Jalasutra.
- Chapman, Audrey R, Rodney L. Petersen, Barbara Smith-Moran. (2000). *Consumption, Population, and Sustainabillity: Perspectives from Science and Religion atau Bumi yang terdesak: Perspektif Ilmu dan Agama Mengenai Konsumsi, Populasi, dan Keberlanjutan*, terjemahan Dian Basuki dan Gunawan Admiranto. (2007). Bandung: Mizan Pustaka.
- Chia, Mantak dan Maneewan Chia. (1995). *Living in The Tao atau Hidup dalam Naungan Tao*, terjemahan T. Zaini Dahlan. (1998). Jakarta: Pustaka Delapratasa.



- Ching, D.K. (1979). *Architecture: Form, Space and Order* atau *Arsitektur: Bentuk, Ruang dan Susunannya*, terjemahan Paulus Hananto Adjie. (1984). Jakarta: Erlangga.
- Ching Ni, Hua. (--), *The Power of Natural Healing atau Kekuatan Penyembuhan Natural*, terjemahan Oentung Yuwono. (1997). Pustaka Delapratasa.
- Ching Ni, Hua. (1979) *Tao: The Subtle Universal Law and The Integral Way of Live* atau *Pedoman Hidup Selaras dengan Tao*, terjemahan Oentung Yuwono. (1997). Pustaka Delapratasa,
- Coats, Callum. (1996). *Living Energies: An Exposition of Concepts Related to The Theories of Viktor Schaubager*, 1998. Bath, UK: Gateway Books.
- Collingwood, R.G. (1974). *The Principle of Art*. New York: Oxford University Press.
- Conrad, Jillian. (1997). *Eco-Villages and Sustainable Communities: Models for 21<sup>st</sup> Century Living*, Forres, Scotland: Findhorn Press.
- Daldjoeni, N. dan A. Suyitno. (2004). *Pedesaan, Lingkungan, dan Pembangunan*. Bandung: Alumni.
- Frick, Heinz. (1996). *Arsitektur dan Lingkungan*. Yogyakarta: Soegijopranata University Press, Kanisius.
- Frick, Heinz. (2004). *Ilmu Konstruksi Bangunan Bambu: Pengantar Kostruksi Bambu*. Yogyakarta: Soegijopranata University Press, Kanisius.
- George, Kenneth M. (2005). *Politik Kebudayaan di Dunia Seni Kontemporer: Pirous, A.D. dan Medan Seni Indonesia*. Yogyakarta: Retorik Press.
- Gie, The Liang. (2004). *Filsafat Keindahan*. Yogyakarta: Pusat Belajar Ilmu Berguna (PUBIB).
- Gie, The Liang. (2004). *Filsafat Seni, Sebuah Pengantar*. Yogyakarta: Pusat Belajar Ilmu Berguna.
- Gie, The Liang. (1976). *Garis Besar Estetik (Filsafat Keindahan)*. Yogyakarta: Supersukses.
- Gorz, Andre. (1975). *Ecologie et Politique atau Ecology as Politics* atau *Ekologi dan Krisis Kapitalisme*, terjemahan Komunitas Apiru/ Yogyakarta. (2002). Yogyakarta: Insist Press.
- Gustami, S.P. (2000). *Seni Kerajinan Mebel Ukir Jepara: Kajian Estetik Melalui Pendekatan Multidisiplin*. Yogyakarta: Kanisius.
- Gustami, S.P. (2004). *Proses Penciptaan Seni Kriya, Untaian Metodologis*. Yogyakarta: Program Pascasarjana S-2 Penciptaan dan Pengkajian Seni ISI.
- Hunter, Beatrice Trum, dan Thomas Hirsch. (2004). *Air and Your Health* atau *Udara dan Kesehatan Anda*, terjemahan Brahm Udumbara P. (2006). Jakarta: Bhuana Ilmu Populer. Ibrahim, Idi Subandi. (2004). *Dari Nalar Keterasingan Menuju Nalar Pencerahan: Ruang Publik dan Komunikasi dalam Pandangan Soedjatmiko*. Yogyakarta: Penerbit Jalasutra.
- Kartika, Dharsono Sony. (1983). *Petunjuk Ilmiah Pengawetan Bambu Tradisional dengan Perendaman dalam Air*. Ottawa: International Development Center.
- Kartika, Dharsono Sony. (2004). *Seni Rupa Modern*. Bandung: Rekayasa Sains.
- Kartika, Dharsono Sony. (2004). *Pengantar Estetika*. Bandung: Rekayasa Estetika.
- Keraf, A. Sonny. (2006). *Etika Lingkungan*. Jakarta: Penerbit Buku Kompas.
- Kodoatie, Robert J. dan Roestam Sjarief. (2005). *Pengelolaan Sumber Daya Air Terpadu*. Yogyakarta: Andi.
- Koentjaraningrat. (2002). *Kebudayaan, Mentalitas dan Pembangunan*. Jakarta: Gramedia.
- Korten, David C. (1999), *The Post-Corporate World* atau *Kehidupan Setelah Kapitalisme*, terjemahan A. Rahman Zainuddin. (2002). Jakarta: Yayasan Obor Indonesia.
- Lawson, Bryan. (1980). *How Designer Thinks*, The Architectural Ltd. atau *Bagaimana Cara Berpikir Desainer* terjemahan Harfiah Widiawati. (2007). Yogyakarta: Penerbit Jalasutra.
- Maliszewski, Michael. (1998). *Spiritual Dimensions of the Martial Arts*. Rutland: Charles E. Tuttle Company.
- Mangunwijaya, Y.B. (1992). *Wastu-Citra: Pengantar ke Ilmu Budaya Bentuk Arsitektural, Sendi-Sendi Filsafatnya Beserta Contoh-Contoh Praktis*. Jakarta: Gramedia.
- Marianto, M. Dwi. (2002). *Seni Kritik Seni*.

- Lembaga Penelitian ISI Yogyakarta.
- Marianto, M. Dwi. (2004). *Teori Quantum, untuk Mengkaji Fenomena Seni*. Lembaga Penelitian ISI Yogyakarta.
- Marianto, M. Dwi. (2006). *Quantum Seni*. Semarang: Dahara Prize.
- Mitchell, Bruce, B. Setiawan dan Dwita Hadi R. (2003). *Pengelolaan Sumberdaya dan Lingkungan*. Yogyakarta: Gadjah Mada University Press.
- Piliang, Yasraf Amir. (2006). *Dunia yang Dilipat: Tamasya Melampaui Batas-batas Kebudayaan*. Yogyakarta: Jalasutra.
- Polkinghorne, John. (2002). *Quantum Theory, A Very Short Introductory* atau *Teori Kuantum, Sebuah Pengantar Singkat*. Terjemahan Wahyu Untara. (2004). Yogyakarta: Jendela.
- Read, Herbert. (1959). *The Meaning of Art* atau *Seni: Arti dan Problematikanya*. Terjemahan, Soedarso Sp. (2000). Yogyakarta: Duta Wacana University Press.
- Sachari, Agus. (1986). *Paradigma Desain Indonesia*. Jakarta: Rajawali.
- Sachari, Agus. (2001). *Desain dan Dunia Kesenirupaan Indonesia dalam Wacana Transformasi Budaya*. Bandung: Penerbit ITB.
- Sachari, Agus. (2002). *Sejarah dan Perkembangan Desain dan Dunia Kesenirupaan di Indonesia*. Bandung: Penerbit ITB.
- Sachari, Agus. (2005). *Pengantar Metodologi Penelitian Budaya Rupa: Desain, Arsitektur, Seni Rupa dan Kriya*. Jakarta: Erlangga.
- Sachari, Agus. (2002). *Estetika: Makna, Simbol dan Daya*. Bandung: Penerbit ITB.
- Samekto, F.X. Adji. (2005). *Kapitalisme, Modernisasi dan Kerusakan Lingkungan*. Yogyakarta: Pustaka Pelajar.
- Sastrapradja, Setijati, Elizabeth A. Wijaya, Soehardjono Prawiroatmodjo, Soejatmi Soenarko. (1977). *Beberapa Jenis Bambu*. Bogor: Lembaga Biologi Nasional-LIPI.
- Setiono, Kusdwiratri, Johan S. Mansjhur dan Anna Alisyahbana. (1998). *Manusia, Kesehatan dan Lingkungan, Kualitas Hidup dalam Perspektif Perubahan Lingkungan Global*. Bogor: Penerbit Alumni.
- Shiva, Vandana. (2002). *Water Wars: Privatization, pollution, and Profit* atau *Privatisasi, Profit dan Polusi*. Terjemahan Achmad Uzair. (2003). Yogyakarta: Insist Press dan Walhi.
- Siahaan, Bastian. (1999). *Diversitas, Pelestarian Jenis, Pengolahan dan Pemanfaatan Bambu di Yayasan Bambu Lingkungan Lestari, Ubud, Bali (Laporan Praktek Kerja Lapangan)*. Yogyakarta: Fakultas Biologi Minat Studi Pengelolaan Lingkungan Universitas Kristen Duta Wacana.
- Simpson, G.M. (1990). *Seed Dormancy in Grasses*. New York: Cambridge University Press.
- Skolimowski, Henryk. (1981). *Eco-Philosophy: Designing New Tactics for Living* atau *Filsafat Lingkungan: Merancang Taktik Baru untuk Menjalani Kehidupan*, terjemahan Saut Pasaribu. (2004). Yogyakarta: Bentang Budaya.
- Soedarso Sp. (2000). *Sejarah Perkembangan Seni Rupa Modern*. Jakarta: Studio Delapan Puluh.
- Soedjono & H. Hartanto. (1991). *Budidaya Bambu*. Semarang: Dahara Prize.
- Soemarwoto, Otto. (2001). *Ekologi Lingkungan Hidup dan Pembangunan*. Jakarta: Djambatan.
- Sumardjo, Jakob. (2000). *Filsafat Seni*. Bandung: Penerbit ITB.
- Sutanto, Jusuf. (1991). *Thai Chi Chuan, Irama Kehidupan, 88 Jurus Menaklukkan Naga*. Jakarta: Pustaka Sinar Harapan.
- Takwin, Bagus. (2001). *Filsafat Timur: Sebuah Pengantar ke Pemikiran-Pemikiran Timur*. Yogyakarta: Jalasutra.
- Wardhana, Wisnu Arya. (2004). *Dampak Pencemaran Lingkungan*. Yogyakarta: Andi.
- Watts, Alan. (1995). *The Tao of Philosophy* atau *Tao Filsafat*, terjemahan Saut Pasaribu. (2003). Yogyakarta: Jendela.
- Widagdo. (2005). *Desain dan Kebudayaan*. Bandung: Penerbit ITB.
- Widjaja, Elizabeth A., Mien A. Rifai, Bambang Subuyanto, Dodi Nandika. (1994). *Strategi Penelitian Bambu Indonesia*. Bogor: Yayasan Bambu Lingkungan Lestari.