

Overexploitation of Sand Mining Leading to Imaginary Landscape: Research-Based Creation

I WAYAN SETEM

E-mail: wayansetem@isi-dps.ac.id

Seni adalah bentuk dan isi (wujud dan makna yang melekat). Ketika pengkarya ingin memberikan bobot filsafati pada karyanya, maka pengkarya memasuki dua ruang penjelajahan estetika, yaitu konsep estetika dan eksplorasi artistik. "Struktur bentuk" menunjukkan "wajah" suatu karya seni dengan pengolahan material, sedangkan "struktur estetika" meletakkan segala hal yang "estetik" sebagai suatu entitas yang ditangkap dalam keterpaduan antara kualitas persepsi dengan pengolahan akal budi yang ditarik kedalam dimensi-dimensi metafisik, etik, aksiologik, dan epistemologik (filsafati). Seperti ide-ide dalam seni rupa yang bertitik tolak (*subject matter*) overeksploitasi penambangan pasir, harus diolah dalam tataran konsep-konsep yang berdimensi estetika, kemudian ditransformasikan lagi dalam tataran visual, maka proses kreatif dan pilihan-pilihan idiom-idiom visualnya menjadi sangat subjektif. Tidaklah mudah dijelaskan setiap tahapan dalam proses kreasi dan pilihan idiom-idiom visual tersebut dapat digeneralisir, diklasifikasi, diverifikasi, dan disimpulkan dalam tataran obyektivitas. Pemahaman teoritik kegambaran visual (nilai visual) menjadi multi interpretasi dan kaya makna (positif), karena nilai kebentukannya mengandung simbol-simbol dan metafora-metafora.

Kata-kata kunci: Seni rupa, artistik dan karya.

An art has something to do with form and content (shape and the meaning attached to it). When an artist intends to add philosophical value to his creation, he enters two aesthetic exploration spaces; they are the aesthetic concept and the artistic exploration. "The structure of the form shows "the face" of an art work which cannot be separated from how material should be processed, and the "aesthetic structure" treats every "aesthetic thing" as an entity which is caught as a combination of the quality of perception and the common sense processing which are drawn into the metaphysical, ethic, axiological, and epistemological (philosophical) dimensions. Similarly, the ideas which are related to the fine arts of which the subject matter is the overexploitation of the sand mining should be processed in the phases of concepts with aesthetic dimension before they are retransformed in the visual stage; therefore, the creative process and the idioms chosen become highly subjective. It is easy to explain every phase in the creation process, and the visual idioms chosen can be generalized, clarified, verified, and concluded in the level of objectivity. The theoretical conception of the visual value becomes multi interpretations and rich in meaning (positive), as the value of its articulation contains symbols and metaphors.

Keywords: Fine arts, artistic and work.

Peer Review : 1 - 20 September 2017, Accepted to Publish : 22 September 2017.

INTRODUCTION

The matter pertaining to the transformational form in the art creation process will become highly important when an artist intends to explain that there is correlation between a concept or idea and the value of the articulation of the art work which will be made. It is possible that the matter pertaining to the transformational form can be more easily understood if the idea/concept of the fine arts refers to the physical object (as the source of inspiration), namely the phenomenon of the overexploitation of sand mining. Such a source of inspiration is then processed in a space of imagination which has subjective creativity in the form of an attractive art work.

It is still necessary to explain the transformational form, what is and what takes place in such a transformation? What instruments can be used to connect one idea which refers to a non-aesthetic thing (the mining impact and activity) with an aesthetic thing? The reason is that the transformational form has become wider than the matter pertaining to imitation.

There are two basic things which need to be understood if the transformational form needs to be analyzed in order to find out the "rationality" in the correlation between an idea and visualization. They are *first*, the meaning of what is true in the art expression and *second*, the characteristic of such an idea/concept in the art creation process.

If related to the phases of creation, "Overexploitation of Sand Mining Leading to Imaginary Landscape" is rooted from a series of deep observations of the sand mining with its impacts. Observation means the activity of directly observing the mining activity without any mediator. The observation which is made is the passive participatory observation, meaning that the artist is not involved in the activities done by those whom are being observed.

When the observation is made, the sense of sight (the eyes), the sense of hearing (the ears), and the nose are involved. In this case, the artist neither agrees nor blames the mining activity but can see all the content and accommodate all the facts neutrally. The senses can catch physical/visual objects, sounds and smell.

From what is observed in the field, it can be stated that the collection of materials is a very interesting process. Sometimes all the things which look simple

should be observed. The reason is that some can be highly useful; who knows? The realities in the field are the stimulus which can enrich the artist. Such realities should be left free in the mind which can then stimulate awareness of a reality or a number of realities.

Observation is made in order to obtain real pictures. The empirical condition in the mining location can be directly observed. In this way, the real picture of the phenomenon which is taking place can be objectively obtained. Observation is also made in order to obtain direct information which is needed to learn the characteristic and activity of the local people. At the same time, observation is also made to crosscheck whether the information obtained from the informants is right or not. The data which are obtained through observation are 1) the data on the mining area; 2) the facilities and infrastructure used in the mining activity; and 3) the impact resulting from such an activity.

We need to support the discourse on and practices of environmental conservation issued and performed by the non-government organizations, foundations, organizations, and government. Attempts have been made to conserve environment such as environmental competitions, 'kalpataru' award, and so forth.

SAND MINING AS A CONCEPT

Sebudi Village and Pering Village are situated on the southern slope of Mount Agung, 65% of their areas are covered with cold lava erupted by Mount Agung in 1963. After the eruption stopped and time passes by, such areas have become fertile and rich in volcanic materials such as sand and stone. Apart from that, the areas have also become good for bamboo and fern to grow. They are also good for 'salak', coconut and coffee plantations. Such plants can inhibit the speed of the surface water. The surface water tends to soak into the ground through the soil pores before it is detained by the stones which have high porosity.

From the hydrological cycle, the morphology of the areas of Sebudi Village and Pering Sari Village are generally mountainous with slopes. In addition, they have 'V'-shaped rivers. From the geomorphological point of view, they are hilly. Apart from that, they are sloppy, causing the surface water to flow to the main rivers with a high enough speed and intensity.

From the ecosystem point of view, the rivers which

are located at Sebudi Village and Pering Sari Village highly importantly functions to support the sustainability of the cycle of the life of living creatures. The function of the areas where the rivers flow 'Daerah Aliran Sungai (DAS)' is so well maintained that it can benefit the surrounding environment. It functions as 1) the echo-drainage channel (environmentally friendly drainage); 2) the natural irrigation channel; and 3) ecology.

In relation to the mining activity, initially sand was dredged at Gunaksa area, Klungkung, the downstream of Unda River, leaving small "lakes" here and there. Many discourses have appeared that such an area should be rehabilitated; however, none has been implemented. After the sand mining was stated to be closed, the sand at Sebudi Village and Pering Sari, the upstream of Unda River, is dredged.

There are many parties that are involved in the sand mining. They are those who run the sand mining 'pengusahatambangpasir' (the investors), those who collect and break stones 'pengosek', the operators of the heavy equipment, truck drivers, foremen 'mandor', vendors 'pedagangacung', fuel croupiers 'bandarminyak', retribution collectors, those who unload trucks 'pengerit', and hoodlums who work as the security guards of the mining area.

1. The Mining Activity and Equipment

The mining activity is mechanically done, meaning that the mining activity is done using machines and other heavy equipment. Such machines and equipment needs much investment. The excavators which are made in China, Korea, and Japan with the trademarks of Hyundai, Cobex, Komatsu, Hitachi, Kobelco, Cat, Shantui, and Airman are used for dredging sand.

In one mining area there are between two and five excavators which move back and forth to demolish banks and trees, lift stony materials, and load the dump trucks with the excavated materials. Their chimneys blow smoke and the machines of the excavators make noise as if there was a war.

The material is carried by the dump trucks using the hydraulic system to the stone crushing plant. Dump trucks are the trucks which are used for loading and unloading material using the hydraulic system. Their rear boxes can move in such a way that they can

unload material backward.

After the sand is sorted based on the fineness of its grains, it is ready to be sold. Hundreds of trucks move back and forth in the mining area to the locations where the sand is sold. On the average one truck carries sand twice a day; in the morning and in the afternoon. It can carry 15 tons of sand although its actual capacity is 7 tons.

Along the streets which connect both Selat, Sidemen and Klungkung, and Selat, Rendang and Klungkung there are teens of portal posts managed by the traditional villages and illegal groups of people. Those who are in charge of each portal post wear the customs which are usually worn by what is referred to as 'pecalang' (the traditional security guards). They are on duty during day time and at night. Each portal post is supervised by two 'pecalangs'.

2. The Mining Impact

The mining activity has resulted in different environmental changes such as the change in the landscape, the change in the habitats of flora and fauna, the change in the soil structure, the change in the flow of the surface water and the ground water and so forth. The impact of such changes varies in nature and intensity.

The bigger the scale of the mining activity, the wider the impact will be. The environmental change resulting from the mining activity can be permanent or cannot be restored as it was before. It is difficult to restore the change in the soil topography, including the change resulting from the change in the area where a river flows.

The mining areas at Sebudi Village and Pering Sari Village used to be the areas of forests and plantations. Now the landscape has changed; there are many big holes which look like volcanic craters. Such big holes are 20 meters in depth and, if added together, they are as wide as a football field. Although they are highly deep, the dredging activity still continues. Sand and stones are excavated.

The cliffs of the rivers seem to have been peeled and the thick vegetation has disappeared. They are scratched with the buckets of the excavators and look like the skin which is scratched by a cat. The 'gelagah' (a type of grass) and the acacia and *gamal* trees (the trees that exterminate elephant grass) which

used to be used by the local people as cattle feed have disappeared.

The mining activity, as an activity which needs technologies and much investment, has certainly contributed to the related economic sectors. Job opportunities are made to be available for the local people although the presence of new arrivals which take part in the mining activity cannot be avoided. The culture and life style of everybody who is involved in the mining project have gradually affected the local people's socio-cultural life.

The sand mining has improved the local people's economy; however, they are not aware of the environmental degradation it has resulted in. "So far, we have never felt anything related to the mining activity' what we have felt is the positive impact; there could be a negative impact but we do not really understand of it", said a local villager staying at Sebudi Village (interview was held on 12 May 2015).

The fact that the sand mining is a prohibited one which has not been well socialized has caused the local people not to be aware that such a mining is illegal. What the local people generally know is that they can accept such a mining as it is their livelihood.

The mining has also changed the local people's emotion towards the river in their life tangibly 'skala' (as an entity which can purify them and fulfill the nutrition they need) and intangibly 'niskala' (as a ritual element). The river has not prepared water as the source of life for fish and several plants which are ready to be picked any longer; nobody has been seen picking 'keceku' and 'kangkung' (two kinds of vegetable). What is referred to as 'beji' (the holy shower) does not have any water in it, meaning that if holy water is needed for the purification rituals 'tirtapengelukatan' and 'tirtapengentas', it is obtained from the well which is made in every compound or it is replaced by the bottled mineral water. In addition, the purification rituals such as 'bayunpinaruh' and 'melukat' cannot be performed in the river any longer as it has already been dry and degraded.

THE SAND MINING IN RELATION TO CREATION

The relation between arts and other matters has become an unlimited interest. The perspective of relation between arts and "what is outside arts" can

interfere with the socio-economic, religious and technological areas.

To what extent the role played by arts is important in the non-aesthetic activity is exemplified by RS. Sites (in Susanto, 2003:61) states that arts have values which function to bridge the roles played by the art works. Such values can be divided into three. They are the use value or the economic value if related to currencies, the narrative value or the ideal value which can also be stated as the religious, moral, historical value and so forth, and the formal value which is stated as the intrinsic value of an art work.

The arts which are related to the ecological awareness can certainly give a great contribution, making it to be able to be a key position in society. Different attempts have been made to conserve environment such as the environmental competition, the 'kalpataru' award, and so forth. However, such attempts should be supported with other activities, one of which is appreciating environment through the art domain. Having scientific capacity, an artist is requested to make arts as parts of the attempts made to campaign for the inspirational environmental issue. In the middle of the environmental ecological damage, environmental appreciation should be improved through the fine art media. In addition, an attempt should be made to reposition the relation between people and the nature so that it will become more harmonious. Making the reality of the social environment present in the practice of fine arts does not mean making people present in their mysterious perspective. What is meant is making the existence of people as a problem; in other words, making them in the social space.

The phenomenon that what the local people living at Sebudi Village and Pering Sari Village know of and treat the river is such an important fact that it should be traced and revealed as urgently as possible using the ecological and sociological approaches. The river used to be the "front veranda", but now it is used as the degraded "rear yard". Based on the real condition of the river resulting from the exploitation of the sand mining, the artist, as the cosmos being, expects for and looks forward to the spiritual value as an idealism leading to a creation entitled "The Exploitation of the Sand Mining Leading to the Imaginary Landscape". What is meant is that by referring to the real landscape of the river at Sebudi Village and Pering Sari Village resulting from the sand mining activity the imaginary

landscape can be created. Such a landscape is based on conscience, the deepest feeling or the idea that the environmental exploitation should be refused through art media.

The artist defines the sand mining exploitation which can lead to the creation of the imaginary landscape as a change in the real landscape damage as an uncontrolled exploitation is responsible for the environmental degradation which can lead to the creation of the imaginary landscape with understandable symbols which can be communicated with audience; as a result, appreciation will appear. In this case, the artist intends to communicate his ideas (messages) to everybody through the art work which is created and can be made to be meaningful to those who enjoy it through the mechanism of articulation.

The ideas which appear in the art works cannot always overcome the environmental problems which are getting complex especially the impact of the ecological degradation. However, such ideas are the attempts made to “prepare a dialogical space”, that is, the dialogue between man and the nature, the dialogue between man and God, the dialogue between a fact and a value, the dialogue between awareness and material, the dialogue between the soul and the body, the dialogue between the subject that knows and the object that is known, and the dialogical between ‘me’ and ‘others’. Awareness of giving appreciation of the ecological insight and environmental ethics to the public is intended to create what is philosophically referred to as ‘tri hitakarana’ (being in harmony). It is also intended to urge the government that it should reorganize its policies in such a way that they will be ecologically oriented. Everything in the universe should be regarded as containing intrinsic values; the cosmos nature is a network whose components are related to one another and constitutes a system with self-organizational ability. Each has such a sense of being sympathetic or participant consciousness that they feel that they are parts of and cannot be separated from the universe which is highly fascinating (enchantment of the world). If this dialogue is not immediately performed, then the environmental crisis and problems will be getting worse, and what is referred to as “crisis of perception” by Fritjof Capra will be getting more serious.

1. Work Design

Work design is the phase in which the artist tries all

visual possibilities after making observations in the field, exploring the art works created by the artists before reviewing the references supporting the subject of the creation. This phase also includes the attempts made from different points of view, and how shapes will be made and constructed. In other words, the data, facts or the ‘hidden’ realities of the subject which is about to be explored are identified. It is in this phase that the artist tries to search out all possible concepts, forms and how they will be presented.

A form is identical with a value as far as the art representation is concerned. However, it should be defined as the “living form”. It should be concerned with the quality of being able to reveal the structures of the material which is particularly picked, sorted and used by the artist through the intuition as needed for expression. Therefore, the ‘shape’ in an art work refers to something which automatically ‘appears’ to accommodate the impetus of feeling after analyzing, thinking about and feeling the realities/facts in the field.

When the work design is exploited, improvisations are also made. In this phase, the artist tries to search out different ideas and concepts which are already stated in the phase of exploration (field observation). Different formations as trials and errors are made. This phase is highly important for the sake of refreshment and actualization of activity.

During the phase when exploration and improvisations are made, the artist should think laterally and divergently (attention is paid to different possible directions); however, in the phase when formations are made, we should think in a convergent way, meaning that attention should be paid to one objective only, that is, how to realize a concept into a work as already planned.

The artist dynamically identifies problems from different points of view and perceptions. Such dynamism is like water which keeps moving following the environment where it is in order to catch and pick the pictures which were vague before a work is created.

The most important thing in this case is the sensitivity to “one” subject which is sometimes viewed as a common, simple, and unimportant thing by the common people, but, in the artist’s opinion, it is an access, the “first stair” to another wide and complex world.

Table 1.What is observed potentially becomes the work design

No.	Potential and opportunity	Work Design
1		
2		
3		
4		

In relation to these work designs, what can be explained is as follows.

1. The landscape of the area after the sand was excavated; it is a cylinder-shaped hill; some bush can be seen growing on the top of it; the bush grew on the surface of the area before it was excavated. The lithological layer of what was erupted by

Mount Agung which includes sand, pumice, stones, volcanic dust, soil and humus can be seen from the landscape. Birds make nests in the green bush and trees which are growing there. A drum was designed with synthetic and plastic grass to represent such a landscape. It happened that many drums were found in the mining area.

2. The hole is the area which was excavated in order to obtain sand and stones. The ragged surface with wide and deep holes potentially cause landslide to take place. In addition, such holes will become dumps during the wet season. Such a condition leads to the design of the statue of a pig whose back is torn and peeled off. Within the pig's stomach there is a diorama of the depth of the hole resulting from the mining activity with steep cliff.
3. The excavator and shovel/backhoe are used for digging, peeling the river's surface, scratching and collapsing the cliff, felling trees, and lifting stones. Such a heavy tool looks highly aggressive and extremely greedy.
4. A shovel is a tool used in the mining area; it is the main tool used by what is referred to as 'pengerit' (those who unload the truck) and 'pengayakpasir'. In the mining area many shovels are used; some are torn, some are broken, some are worn-out and some others are perforated. They represent different characteristics of those who are involved in the sand and stone mining activity with its different impacts. The characters which are visualized are also the metaphors of the human natures; some look like lions as the metaphor of power, strength, and arrogance. Some look like pigs symbolizing those who are lazy, greedy and so forth. In this work design, the elements of the shovel and the fact that the disappearance of the vegetation in the mining area are combined. The artist can see that if the root, stem, and twig of a tree are combined, they can be used as the grip of the shovel. After the shovel is formed, the root, which is used as the grip, becomes upside down.

In the visual articulation the idioms of visual language are transformed based on what is desired by the artists. The relationship between the visual symbol (idioms, genres, in the visual language) and the reality (subject matter) does not reflect how to paint accurately (one to one) but only shows that the ideas in the visual symbols "correspond" to the ideas in the reality (subject matter). Experiences, feelings, and artistic choices have been "formatted" in the concept matter already chosen by the artist. The visual articulation will be artistically considered successful if every articulation form can be understood by and satisfy the artist. The form deviation tends to take place in the "pleasure of playing shapes" as the articulation of ideas can show that there is an additional value. It is

difficult to freeze the visual wealth in the imaginary space when such ideas are expressed. The reason is that actually the visual diversity in the experiences which are unconsciously kept is richer than what it is expressed.

Then when the concept is stated in a particular shape, such a shape should be presented. It is here that the artist can critically see his weakness and strength, and can test whether the idea, concept and actual language have already been synchronous or not. It can be critically asked whether there has been a relationship in which the wave (idea + concept) and its particle (physical form) complete each other.

Understanding that an art is form and content (the shape and meaning attached to it). When the artist intends to add philosophical value to his work, he enters two spaces of aesthetic exploration; they are the aesthetic concept and artistic exploration. In other words, the artist enters two spaces of abstraction; they are the "aesthetic structure" and the "form structure". The "form structure" shows the "face" of an art work and how the material is processed, and the "aesthetic structure" treats every "aesthetic" thing as an entity which is caught in the alignment of the quality of perception and how the common sense is processed which is not only in the psychological dimension but it can also be drawn into metaphysical, ethic, axiological, and epistemological (philosophical) dimensions.

In the discourse on the fine arts, the meaning of the word "aesthetic" is different from that of the word "artistic"; however, they are frequently vaguely used to assess the value of the fine art works. If the artistic value (the beauty of shape) becomes the main objective of the articulation of a fine art work, then its artistic meaning will be equal to the aesthetic meaning, as what is stated in the formalism aesthetics developed by Schiller and Baumgarten. However, if the artistic value (the beauty of shape) is only the element or part of the intactness of a work with philosophical meaning/ ideological concept, then the aesthetic meaning will not be equal to the artistic meaning. The reason is that the scope of the aesthetic meaning is wider, and it is in the level of concepts.

In this level the artist is faced with the question how the aesthetic concept which is meaningfully constructed correlates with the visual (artistic) value which is visualized. Unlimited diverse variants of

shapes in all the fine art expressions have unlimited fine art variants as well. In addition, their correlations are random as well. The ideas in the subject matter of the overexploitation of the sand mining should be processed in the level of concepts with aesthetic dimension. Then they should be transformed in the visual level, making the creative process and the visuals sorted highly subjective. It is not easy to explain every phase in the process of creation and the sorted visual idioms can be generalized, classified, diversified, and concluded in the phase of objectivity. The theoretic understanding of the visual value becomes multi interpretations and rich in meaning (positive) as the value of its formation contains symbols and metaphors.

CONCLUSIONS

Actually, art works express the values of life. Such an expression does not start from nothing. The “created shapes which are created” as the expressed work design symbolize experiences, self-projection, feeling, values and the facts artistically sorted by the artist.

By intensively observing the phenomenon of the overexploitation of the sand mining which awakens the artist’s emotion/feeling and attracts different elements of his experiences, the artist “construct ideas” as the response to such a phenomenon. What is meant is that the physical and non-physical phenomenon of the sand mining (the change in the landscape, different tools used in the mining area, the environmental change, the social change, conflict) will construct ideas as far as such a phenomenon “touches the feeling, self-projection, experience, and the sorted values which the artist has.

The reason why the artist responds to the phenomenon of the sand mining at Sebudi Village and Pering Sari Village is that the emotional contents which the artist’s soul has are touched. In addition, the artist is also made to tremble, be worried and sad. If the artist traces his childhood, he feels so sad. His experiences when he was a child which touch the river ‘tukad’ at the village where he was born (Selat Village, Karangasem) constitute a cosmological approach which gives him an unforgettable memory.

REFERENCES

- Bakker, Anton, 1995. *Kosmologi dan Ekologi: Filsafat Tentang Kosmos sebagai Rumah tangga Manusia*, Yogyakarta, Kanisius.
- Berger, Arthur Asa, 1984. *Sign in Contemporary Culture, An Introduction to Semiotics* atau *Tanda-tanda dalam Kebudayaan Kontemporer: Suatu Pengantar Semiotika*, terjemahan M. Dwi Marianto (2005), Yogyakarta, Tiara Wacana.
- Capra, Pritjof, 2001. *Tao of Physics: Menyingkap Pararelisme Fisika Modern dan Mistisisme Timur*, Yogyakarta, Jalasutra.
- Darma, Hj. Yoce Aliah, 2009. *Analisis Wacana Kritis*, Bandung, Rama Widya.
- Djelantik, A. A. M., 1999. *Estetika: Sebuah Pengantar*, Bandung, Masyarakat Seni Pertunjukan Indonesia (MSPI).
- Effendi, H., 2003. *Telaah Kualitas Air bagi Pengelolaan Sumber Daya dan Lingkungan Perairan*, Yogyakarta, Kanisius.
- Feldman, Edmund Burke, 1967. *Art as Image and Idea* atau *Seni sebagai Ujud dan Gagasan*, terjemahan Gustami, SP. (1991), (tidak diterbitkan), Englewood Cliffs, New Jersey, Prentice-Hall Inc.
- Gadamer, Hans Georg, 1975. *Truth and Method*, London, Sheed & Warrd.
- Gustami, SP., 2006. “Kearifan Ekosistem dan Kecemasan”, dalam Agus Burhan (Eds.) *Jaringan Makna Tradisi Hingga Kontemporer*, Yogyakarta, BP Institut Seni Indonesia Yogyakarta.
- Marianto, M. Dwi, 2006. “Metode Penciptaan Seni”, dalam *Surya Seni*, Vol. 2 No. 1 September 2006, Yogyakarta, Program Pascasarjana Institut Seni Indonesia Yogyakarta.
- _____, (2006), *Quantum Seni*, Semarang, Dahara Prize.
- _____, 2010. “Relasi Bolak-balik Antara Seni dan Daya Hidup”, dalam *Pidato Pengukuhan Jabatan Guru Besar* di Fakultas Seni Rupa, Yogyakarta, Institut Seni Indonesia Yogyakarta.

Moelyono, 1997. *Seni Rupa Penyadaran*, Yogyakarta, Yayasan Bentang Budaya.

Kartasapoetra, G. A. G., 1985. *Teknologi Konservasi Tanah dan Air*, Jakarta, Rineka Cipta.

Rahim, S.E., 2006. *Pengendalian Erosi Tanah dalam Rangka Pelestarian Lingkungan Hidup*, Jakarta, PT. Bumi Aksara.

Prime, Rancor, 2006. *Tri Hita Karana Ekologi Ajaran Hindu: Benih-benih Kebenaran*, (terjemahan K.G. Wiryawan), Surabaya, Paramita.

Purwasito, Andrik, 2003. *Massage Studies: Pesan Penggerak Kebudayaan*, Yogyakarta, Ndalem Purwahadiningratan Press.

Sachari, Agus, 2000. "Riset di Bidang Desain dan Kesenirupaan", dalam *Refleksi Seni Rupa Indonesia*, Jakarta, Balai Pustaka.

_____, (2002), *Estetika: Makna Simbol dan Daya*, Bandung, ITB.

Sumardjo, Jakob, 2000. *Filsafat Seni*, Bandung, ITB.

_____, 2002. *Arkeologi Budaya Indonesia (Pelacakan Hermeneutis-Historis Terhadap Artefak-arteafak Kebudayaan)*, Yogyakarta, Qalam.

Soemarwoto, Otto, 1985. *Ekologi, Lingkungan Hidup dan Pembangunan*, Jakarta, Djambatan.

Tabrani, Primadi, 2009. *Bahasa Rupa*, Bandung, Kelir.

Tedjoworo, H., 2001. *Imaji dan Imajinasi: Suatu Telaah Filsafat Post Modern*, Yogyakarta, Kanisius.

Wiana, I Ketut, 2009. "Air Permata Bumi", dalam *Air dalam Kehidupan, Fungsi dan Perannya dalam Kebudayaan Nusantara*, Denpasar, SSEASR bekerjasama dengan Universitas Hindu Indonesia dan Institut Seni Indonesia Denpasar.

Widaryanto, F.X., 2015. *Ekokritikisme Sardono W. Kusumo: Gagasan, Proses Kreatif, dan Teks-teks Ciptanya*, Jakarta, PascaIKJ

Majalah/Surat Kabar/Katalog

Freitag, Thomas U., (14 Februari – 14 Maret 2009), "Expectation Confirmation" dalam *Katalog Pameran Kelompok Galang Kangin dan Teman-teman* di Tony Raka Art Gallery Ubud, Bali.

Balai Pengelolaan DAS unda Anyar. (2009), *Rencana Teknik Rehabilitasi Hutan dan Lahan Daerah Aliran Sungai (RTK-RHL DAS) Wilayah Kerja BPDAS Unda Anyar*, Denpasar, Balai Pengelolaan Daerah Aliran Sungai Unda Anyar.

Departemen Kehutanan. (1998), Keputusan Direktur Jenderal Reboisasi dan Rehabilitasi Lahan Departemen Kehutanan Nomor: 041/Kpts/V/1998 tentang *Pedoman Penyusunan Rencana Teknik Lapangan Rehabilitasi lahan dan Konservasi Tanah Daerah Aliran Sungai*, Jakarta, Departemen Kehutanan RI.

_____, (2009a), Keputusan Menteri Kehutanan RI Nomor: SK. 328/Menhut-II/2009 tentang *Penetapan Daerah Aliran Sungai (DAS) Prioritas dalam Rangka Rencana Pembangunan Jangka Menengah (RPJM) tahun 2010–2014*, Jakarta, Departemen Kehutanan RI.

_____, (2001), Keputusan Menteri Kehutanan Nomor: 52/Kpts-II/2001 tentang *Pedoman Penyelenggaraan Pengelolaan Daerah Aliran Sungai*, Jakarta, Departemen Kehutanan RI.

Narasumber

1. Nama : I Made Mangku Tirta
Umur : 61 Tahun
Pekerjaan : Wiraswasta
Alamat : Banjar Sebudi, Desa Sebudi, Selat, Karangasem, Bali,