Turnitin Originality Report

Ms by Dayu Mahara
From Artikel 1 (Adek Bu Dayu)

Processed on 23-Nov-2018 13:35 WIB
ID: 1043725171
Word Count: 5761

Similarity Index
9%

Internet Sources: 9%
Publications: 1%
Student Papers: 1%

sources:

1 6% match (Internet from 23-May-2014)

2 1% match (Internet from 11-Aug-2012)
http://www.arthearchitect.com/project/

3 1% match (Internet from 29-Jun-2017)

4 < 1% match (publications)

5 < 1% match (Internet from 18-Oct-2018)
https://en.wikipedia.org/wiki/Vernacular_architecture

paper text:
BALI AGA ARCHITECTURAL MORPHOLOGY IN CONTEMPORARY BUILDINGS CASE STUDY : PURI AHIMSA & TAMAN AHIMSA VILLA AT MENGWI - BADUNG Author : Ida Ayu Dyah Maharani Doctoral Student of Art and Design Program

Faculty of Art and Design Institute of Technology Bandung

dyahmaharanee@yahoo.co.id/ dyahmaharanee@gmail.com Second Author : Dr.Imam Santosa,M.Sn & Dr.Prabu Widodo,M.Des

Faculty of Art and Design Institute of Technology Bandung

imamz@fsrd.itb.ac.id & pwardono@yahoo.com Abstract From four different periods of Balinese architectural history, it is obvious that architectural life styles were started during the Bali Aga period when humans started to settle down and occupy an area built their settlements. However, currently these settlements and their architectural styles as local genius have been faded away since the era of Bali Madya. The knowledge of Bali Aga architectural styles has not been transmitted to later periods. This in turn has made them less
popular than the later concept of Bali Madya. The down of Bali Aga architectural styles has also been worsening by the rapid development of mass tourism which brings influences to Balinese architecture development. They come to enjoy the Balinese natural beauty, the culture of Bali and its architecture. It is its uniqueness and traditional sensation that attract tourist’s attention to enjoy the traditional Balinese architecture with all its local characters. Sadly, Balinese contemporary architecture tends to present a newer version of Balinese architecture which is recognizes as fresher and different from what has been mainstreamed long before, have clean cut forms, geometric, minimalistic and sometimes an analogue of some natural forms, less ornamented in modern materials and colors. To sustain the value of Bali Aga architectural styles, it is important to research the continuity of this style by employing morphological study. The idea is to recognize and to understand the local genius as the background to develop a new strategy by implementing some concepts that are still relevant to current situation. The use of morphological study is essential in researching what elements are recognized as relevant by evaluating some hospitality project by Arte Architects and Associates. Some works that will be discussed are contemporary villas : Healing Center and Rental Villa Puri Ahimsa and Taman Ahimsa, both located at Mengwi in Badung Region. From the evaluation, it can be seen that some concepts of Bali Aga has been implemented in the design, however, there are also some adjustments that can be obviously seen. As a conclusion, in these buildings, some Bali Aga architectural concepts can still be implemented in modern contemporary villa buildings, in different functions from its original functions and in different geographical characteristics. Key words: architectural morphology, Bali Aga architectural styles, tourism, contemporary villas, visual form. A. INTRODUCTION

There are four different periods of Balinese architectural history, that are widely accepted, as defined by Gelebet (1978) which are: Bali Mula (an era when humans live nomad), Bali Aga (around 8 – 13 AD), Bali Madya (started from 14 AD when the Bali was influenced Majapahit Kingdom), Bali Kolonial (started when European influences was introduced) and Bali modern. In a small island like Bali, vernacular architecture was started from the Bali Aga era whereby humans tried to settled down. This era mushroomed from around 8th century to around 13th century, before Majapahit Kingdom influenced Bali or known as Bali Madya or Bali Arya period. The notion vernacular is coming from the word vernacullus which means local, inlander.

The development of vernacular architecture was running in a slow and lengthy period which makes its form deeply rooted in the society. As a relatively big archipelago, Indonesia has a wide variety of cultures which occupy its thousands of islands. Architecture has also become the backbone of local culture of Indonesian people since architecture is often linked to social system, kinship, to religious rituals. Furthermore, Paul Oliver defines vernacular architecture as houses of the ordinary people and other buildings related to their environmental context, using available sources from their surroundings to build their buildings and using traditional technology. All vernacular forms were built to fulfill specific needs to accommodate economic value dan way of life of living culture. Principle of vernacular architecture, as defined by Yasraf Amir Pilliang, is form follows meaning.

Gartiwa, Marcus (2011) Morfologi Bangunan dalam Konteks Kebudayaan, Penerbit Muara Indah, Bandung
Bernard Rudofsky in his seminal work of local architecture globally discover there are buildings exist without any architects but the people who build them to meet their needs. Rudofsky categorized these buildings as non formal architecture which later on well known as architecture without architects. Aga itself means mountains. Therefore, Bali Aga villages spread out in three different regions in Bali which has mountainous areas. These regions are Buleleng, Karangasem and Bangli. Generally, Bali Aga architecture has its own unique characters influenced by its locations, availability of building materials, technology and local belief of each region which also vary. Bali Aga vernacular architecture has been developed in a process that is not in a short period, cyclical in line with attitude, casualities and local culture where it has been growing. Vernacular buildings usually consist of small number in building mass, has a simple form considering that its function is to fulfill basic needs of its occupants. (a) (b) (c) Image 1 The spread of Bali Aga villages. Buleleng (a) including : Julah, Sembran, Sidatapa and Tigawasa; Karangasem (b) including : Tenganan dan Bugbug; and Bangli (c) including : Sukawana, Bunyan, Pinggan, Panglipuran, Pengotan and Bayung Gede After 13th century whereby the Majapahit Kingdom came and influenced Bali, the building process of Bali Aga seems to end and not sustained. The knowledge was also not been transmitted to the later periods. The building traditions which are developed currently, especially in the midland of Bali, is those coming from the Bali Madya or Bali Arya which is strongly influenced by the Majapahit traditions. This in turn becomes one of many causes of the faded of Bali Aga traditions. Currently, Bali Aga architecture was less popular comparing to Bali Madya traditions. The popularity of Bali Aga traditions has been swallowed by new wave hospitality architecture brought by tourism sector. Tourists come to Bali to enjoy not only natural beauty but also to enjoy the local culture of Bali including its architecture. The tourists would like to experience the atmosphere of Balinese architecture with all its characters and uniqueness without any changes. Therefore, many buildings have been built to imitate traditional Balinese architecture. The markets for these kinds of facilities have been growing fast and have been supported by the tourism industries. As has been lead by market mechanism, the buildings have been and being built based on the needs of the tourists and not to conserve the value of the building itself. The eclectic styles, combining two or more design styles can be found easily as the results to confirm the appearance of the tourist in Bali. All western standards of building are also presence. In line with the development of the era, architecture in Bali also influenced by modern aspects such as effectivity, efficiency, comfort which are the needs of modern society. This leads to a situation where architecture should compromise to combine each plus point of each architecture styles, Bali and western. This kind of design strategies produce new styles which is known as fresher, new, different from what has been established long time before and break mainstream identity of the traditional Balinese architecture. Modernity, nowadays, can be defined as a shallow cultural adoption without any effort to dig a deeper understanding. The definition of the word contemporary, in architecture, is something that is seen bringing something new, something that is in a more advance position, variatif, flexible, innovative both in form and appearance, materials and hot being used, technology and something that has become trend currently. Balinese architects who work in this contemporary situation are used to develop their modern ideas and concepts into their works, combine these with traditional value of Balinese Architecture, which in this situation, Bali Madya styles are used the most. Balinese architecture which became norms nowadays, has clean form, geometric, simple (minimalistic) and sometimes analogue of any form, without any ornaments, uses modern material : glass and concrete, reducing human activities with the use of modern technology, non natural colours to create it as point of view in its environment. a b c d Image 2 Samples of some contemporary Balinese buildings. a. Spot in Kuta Galleria Shopping complex, b. Cineplex 21 façade at Mal Bali Galeria-Kuta, c. Duty Free Shop façade at Mal Bali Galeria-Kuta, d. Restaurant in Mulia Resort-Nusa Dua There is, in fact, an older local genious far before the Bali Madya era but has never been spotted in light. The concepts of Bali Aga are rarely used by contemporary architects in their contemporary buildings.
However, there are some architects considering these concepts as still relevant in the contemporary situation. These architects are often implemented these concepts in the buildings that they designed. The works of Arte Architect and Associate are case in point. Their works such as Healing Center & Rental Villa Puri Ahimsa and Rental Villa Taman Ahimsa located in Mengwi, Badung regency tried to implemented vernacular Balinese architecture concepts rooted in vernacular buildings. Of course it is almost impossible to implement 100% of the concepts in a contemporary situation. Bali Aga was a starting point of Balinese architecture tradition while contemporary situation is here, in the other end of two poles. Digging the value of Bali Aga vernacular can be done by implementing and adopting its basic principles or reproduce some part of its forms, if this still can be done, or presence its cultural value as a new concepts rooted in the past to be implemented in current situation. In short, the concept should be formulated to mainstream the value of the past to fill the needs of current situation.

B. METHODOLOGY
This research is a case study qualitative within the topic of morphology study of Bali Aga architecture from the past. The concept of Bali Aga still can be transformed and be implemented in contemporary villa buildings in current situation. Morphology study will focus on three main criterions which are: 

§ Building mass: basic forms, outlines, building skeleton, etc.
§ Façade: materials, colors, texture, etc.
§ Environmental design: a cyclical process of the buildings and their surroundings. To have a deeper understanding of the topic, this research will have some limitation. Employing morphology study, samples for this study will be taken from Bali Aga settlement in Bangli region by selecting some of traditional houses from Pengotan village. Samples were chosen based on some consideration: distinctiveness, represent the simplicity character of Bali Aga. Furthermore, samples from modern contemporary villas will be Puri Ahimsa Villa dan Taman Ahimsa Villa, both located at Mengwi-Badung and works of Arte Architect and Associates. These villa were chosen since it has similar function as settlement units. However, there is a distinct character where traditional houses are permanent occupation while villas are for short term stay, have commercial characters in its relation to tourism. The analysis will be done holistically using frame-work as hown by image 3. From the frame-work, it can be seen that the analysis will also include the values of Bali Aga architecture particularly those in Pengotan village. Tourism sectors make Balinese architecture developed rapidly where thousands of new hospitality buildings packed the island. Tourists that come to Bali not only love to see the natural beauty of the island but also its culture including its architecture. Balinese today’s architecture is racing to attract tourist attention to make them seen by tourists. Tourists are craving to see Balinese original architecture. Many architects try to create a new concept of Balinese architecture by mixing, combining, or re-interpreting traditional architecture and modern architecture. In this paper, the concept of Bali Aga architecture principles will be discussed by comparing it to contemporary Balinese architecture to try to find a thin red line that may be used as a guiding principles for future development. Balinese Architecture Rule “BALI AGA” CONTEMPORARY ARCHITECTURE The value of Tourism Bali Aga Architecture Influences Image 3 The frame work 3 Soetiadji S. Ir. Setyo (1986) Anatomi Estetika, Penerbit Djambatan, Jakarta C. DISCUSSION BALI AGA VERNACULAR BUILDING Victor Papanek claimed that architecture is a complex network among functions which also showing the complexity of the culture of the society. In the beginning, architecture was built as a shelter to protect human from outdoor environment. Later on, with their improved skills, humans divide the rooms and made more advance building within what Amos Rapoport called as Ideal Schemata. With these skills, furthermore, humans produce vernacular buildings. Vernacular, comes from the latin word vernaculus’ means native or local people, or comes from local root. In Italian, vernacular comes from the word verna which means local worker. 4 From these meanings, it is obvious that there is a concept of locality in the term ‘vernacular’. Vernacular Bali Aga buildings have been built locally to protect their occupants from harsh natural weather and situations. Generally, the buildings made using local technology which has been developed locally by local people and has been examined by time for such a long period enable them to well adapt to their surrounding environment. Vernacular buildings are a spontaneous reaction of human to fill their basic needs. The value of vernacular buildings is not clearly seen physically but it can be felt from the relation of the buildings and the occupants, the buildings and their surroundings, the buildings and the site, and between buildings that form a settlement. 5 Materials of vernacular buildings are gathered from
surroundings make the buildings and settlements blend in with the site harmoniously. Typology of these buildings could be categorized as region specific. Apart from materials, colours, styles, space language and final product of the process also create distinct characters. Bali Aga architecture has its own distinct characteristics, original and fit in with the needs of its users. Uniformity and shared values among buildings create a human scale yet friendly environment. Through tradition from generation to the next generation as well as trial and error effort, buildings were built based on mature consideration. The use of locally harvested materials create micro climate that is comfort in addition to door and window openings, overall form, technology and constructions that are locally developed. Traditional building structure is based on locally available materials. In a place, where trees can be found easily, it usually use wood as the main materials and where bamboo dominates the landscape will use it as much as possible. From locally sourced materials and environmentally friendly materials, vernacular buildings can be categorized as low cost buildings. Vernacular buildings are perfect example of buildings that are built as environmentally friendly, fulfill the needs for space, uses local materials, locally developed technology and can sustain a long period of time. Aspects of local influence Bali Aga vernacular buildings are: climate (macro climate is a significance factor in vernacular buildings), culture (way of life of its occupants influence building forms and mass), dwellings, sites and materials (these two aspects give characters to the physical of the buildings) Vernacular Buildings of Pengotan Village in Bangli? Typology and Morphology Plots of Pengotan village have different characters compare to what has been accepted as Bali Madya concept of Sanga Mandala. Sanga Mandala is widely known in Bali as the common principle which divides the plot into nine smaller area imaginary. Each small area has different value according to its position to the mountain or to the sun rise direction. Massing principle of Pengotan village plots is simply divides the plot into two values of hulu-teben. The concept of massing position is depends on the function and the value of the buildings. The pattern can be seen as follow: - Zone Hulu is the highest value for family shrine - Zone Tengah has moderate value for Bale Meten (sleeping pavilion) or Bale Sakanem (ceremony pavilion) - Zone Teben has the lowest value for Angkul-angkul (entry gate) sometimes also completed with a granary Building orientation of Pengotan village is to the central courtyard popularly known as Natah. This to represent the meeting point of Purusa (male spirit) in the form of the sky Akasa or empty space, with Pradana (female spirit) in the form of Pratiwi or the earth. Bale Meten oriented to the south while Bale Sakenem oriented North. In between these buildings is the open courtyard, the Natah. Entrance to the shrine is toward the south. Pattern of circulation is simple, directly to the open courtyard and then to each building unit. As such, the concept of hierarchy is only Hulu-Teben principle, whereby the pattern is from teben to hulu. 4


5 Ibid 6


7 http://gedemahaputra.wordpress.com/2014/01/03/sekali-lagi-vernacular-buildings/, 19 November 2014, 10:28 wib Image 4 House pattern of Pengotan village Form and function of each building in a house in Pengotan village will be described as follows: 1) Family Shrine (Sanggah) is a place to worship ancestors and the god. Within the shrine, one can found several structures which have different function. Number of structures is vary, depends on status of the owner. However, there are structures known as basic which are: . Pesimpangan Bhetara Gunung Agung and Pesimpangan Bhetara Tuluk Biu. Both buildings use palm fibre
as their roofs. Pesimpangan Bhetara Majapahit and Pesimpangan Bhetara Maospahit. Both buildings use bamboo as their roof as other buildings in the plot. 2) Bale Meten : located in the northern part of the plot after the shrine and often called as Bale Daja. The function of Bale Meten is as sleeping and cooking pavilion (paon). Two beds can be found inside Bale Meten in the lefthand and righthand side. Tradition earthen stove is placed between these beds. Form of Bale Meten is square with eight wooden posts support the roof. The foundation of this bale is raised above the ground high enough (±75-100 cm) to avoid the water being absorb and influence indoor comfort. Walls are divided from the structure using woven bamboo enables light and air entering the building gently. 3) Bale Sakenem : located in the southern part of the plot facing the Bale Meten. Native people of Pengotan village see this situation as male and female that should be coupled. The word Bale Sakenem means six posts pavilion and has a square form. The function of this pavilion is to conduct traditional ceremony for the humans and when there is no ceremony it can also be used as a sleeping pavilion for male. A bed can be found in this pavilion strengthen the structure of the pavilion. Only walled in two side, this building create a spacious space for traditional ceremonies. But, since it is also used as a sleeping pavilion, two temporary walls made of bamboo woven are provided. These temporary walls can be opened or closed in a knock down system. The height of this pavilion is similar with the Bale Meten 50-75 cm. 4) Angkul-angkul is an opening function as an entry gate. There are two type of angkul-angkul. One angkul-angkul is the entrance of the core or gangway and the other one is to enter a plot from the gangway. The materials for angkul-angkul is made of compacted earthen material and bamboo for its roof. Some of the angkul-angkul sometimes without any roof. Shrine Bale Meten Bale Sakanem Angkul-angkul Image 5 Typology and morphology of Pengotan village houses § The Interior's Element 1) Floor : generally using earthen material without any layers especially in the traditional buildings. In non-traditional buildings, some concrete or tiles are applied as the top layer of the floor. Raised foundation is covered with river stone in the traditional buildings but in a more advance buildings, red bricks or cemen plaster can be found. Post’s base made of paras stone and some also uses river stone. New building technologies provide more variety converse the use of traditional materials and technologies to non-traditional materials. In fact, many buildings in Pengotan no longer have traditional characters. 2) Walls are used as room divider (in traditional buildings). The material for walls is woven bamboo. The sizes of the bamboo are big enough to enable light and air to enter from outdoor to interior spaces. In some part of the walls where it is used to support the structure of the building, wood are used (jackfruit wood, kwanitan wood) which can be found from the surrounding trees. Bamboo is used as supporting structure materials for sineb-lambang, canggah wang dan bale-bale (galar). 3) Roof structures usually utilize wood and palm tree for its rafters which is constructed in traditional way using bamboo as the nails. In religious buildings, roof is made of wood as the structure and bamboo shingles are used to cover it. Apart from bamboo, some religious buildings also uses palm tree fibre as roof covers (pesimpenan Bethara Gunung Agung dan Tuluk Biu). In more advance buildings, roof tiles and corrugated metals are popular materials for covering the roof. Roof form are stiff as a mountain since the people belive that mountain is the most sacred place where their ancestors live. CONTEMPORARY VILLA BUILDINGS IN MENGWI-BADUNG To represent modern buildings, this research takes Puri Ahimsa dan Taman Ahimsa as its case studies. Both are the work of Arte Architects and Associates. This architecture firm was established in 1996 with the slogan “we believe architecture should enrich our physical and spiritual life experience and achieved by a full passion and total commitment to the project”. Arte Architects and Associates works spreads over the island of Bali and other region in Indonesia as well as aboard:

2Singapore, Maldives, Taiwan, Japan, Saipan, Hawaii, Costa Rica, France, St.Martin, Caribia and Belize.

Arte Architects and Associates has won many awards from Indonesian Institute of Architects : - Award Nominee for
2 Surya Pranawa Private Residence, Bandung, Indonesia, 1992. - Indonesian Architect Association Award, 2005, with distinguish honor for hotel project for Puri Wulandari Boutique Hotel and Spa project, Ubud, Bali. - FuturArch Green Leadership Award, 2011, for Commercial Architecture for Fivelements project Puri Ahimsa Healing Center, Mambal, Denpasar, Bali - Asia Pacific Spa Hotel Awards, 2011, as Higly Commended Spa Hotel Indonesia for Fivelements project Puri Ahimsa Healing Center, Mambal, Denpasar, Bali.

§ Concept in Villa Design In general, these projects (both Healing Center & Rental Villa Puri Ahimsa and Rental Villa Taman Ahimsa)

1 develop in accordance to the Balinese concept of Tri Hita Karana, which are harmony relation to God, harmony relation to human and harmony relation to nature.

Since the Green Globe have a clear criteria to reach this harmony and confirm with the Tri Hita Karana concept, than all aspect will measure and in accordance to the Green Globe criteria. 1) Healing Center and Rental Villa Puri Ahimsa di Banjar Baturning, Mambal, Mengwi-Badung Reception Area

1 Reception as the main entrance to the place is adopted from one of Balinese architecture called Bale Timbang. Bale Timbang is a simple building formed by a life tree post and a thatch roof. The function of the building is a meeting place to rest and discuss the problem and differences for the farmer. By adopting this building as the entrance to the center is an expression of the main purpose of the center to bidge and discuss the differences.

1 In front of the reception planted a Banyan tree, which is in every village in Bali mark as a center of the village, a meeting place and a place for shadow during the hot day. The Banyan tree here also acting as a sign that this center is place to find a shadow from a hot everyday life. Image 6 Ideas and the built form of reception area

1 Multi Purpose Building This building is a manifestation of three concept: a. Rwa Bineda or Purusa-Pradana: can be translated as two that different, has been known as a basic root of the
1 civilization all over the world. We know Lingga and Yoni, Adam and Eva, Yin and Yang, Feminine and Masculine symbol, positive and negative. In Bali, if the Purusa (masculine) and Pradana (feminine) collaborate, we believe something will born or created. b. Proportion : Balinese traditional architecture method is called Asta Kosala Kosali. On the Asta Kosala Kosali the building measurement and proportion is base on human body, every part of the building will measured base on the user body.

dimension. c.

1 Tumpeng : is one of the element of Balinese offering, made from a rice and shaped as a mountain. This offering is a symbol of thankfulness of the Balinese to the prosperities given by the nature. The shape of the tumpeng adopted as a vertical shape of the building. As a collaboration of the above three concept, born the overall shape and form of the multi purpose building. As a center of activity and conference room, where the differences and problem (rwa bineda) discussed to create a solution and idea that harmonious with the universe and will bring all human to unity and peace on prosperous world.

Image 7 Ideas and the built form of multi purpose building Restaurant Area The idea comes from the shape of banana’s leaf.

1 For the Balinese, Banana’ s leaf (don biu) is always related with the food. They use banana’ s leaf as a food wrap food plate and folded as a spoon. The restaurant building’s form and shape is adopted from the banana’ s leaf. By using the material of coconut tree, bamboo and thatch, the organic shape of banana’ s leaf is transform to the open restaurant.

Image 8 Ideas and the built form of restaurant area 2) Rental Villa Taman Ahimsa at Seseh Beach, Mengwi-Badung Built in 2009, the basic idea of this facilitiesy is an upside down boat or a sea shell. The concept for the swimming pool is a crescent moon. The location of the facility, which is near Seseh Beach, influences the main ideas of the buildings. Crescent moon idea was come from the moon cyclus from full moon to a non-moon which influences the high tide and low tide of sea level. The architect says that the project was started on the non-moon cyclus. Image 9 Ideas and the built form of Taman Ahimsa villa. §? Architectural Morphology Both buildings in two villas were built in modern form to accommodate the activities of the users. The outlines of the buildings are straight and curved lines. These concepts are contrastly different from morphology of Bali Aga vernacular buildings. This can be understood if we consider simple technology and simple concept of hulu-teben represented in square building form. All forms that were built in the past by the Bali Aga people represent their belief to the concept hulu-teben. All aesthetic values were also offered vertically to the divinity God. In some villa buildings, the concept of analogy also been implemented as a
response to their site. In Puri Ahimsa, multi purpose building used conical rice cake (tumpeng) as the analogy and the restaurant takes banana leaf that is used as a traditional dinning plate, as the analogy. In Taman Ahimsa, located near the beach, it is inspiration from the sea that is use as the design concept : boats, sea-shell, moon. Mass and façade design uses open plan which uses of massive walls are limited. This enables natural air circulation as well as natural light gently lit the interior of the buildings. Similar situation can be found in Bali Aga buildings which walls are used just as dividers and not supporting the roofs. Walls also not in massive form leave, some openings made the buildings breathe and the interior spaces are naturally lit by the sunlight. Natural materials are widely used in both Puri Ahimsa and Taman Ahimsa. Materials that are coming from modern industrialized world : glass, concrete, ceramic tiles, can only be found in a very limited amount. Woods and bamboo are used as the main structure materials. Posts that support the roof and the roof structure itself utilize woods and bamboo as their main materials. Almost no artificial colours can be found, since the colours of the materials are left without any finishes. This similar to Bali Aga situation which paint and concrete plaster were not been implemented in the past. Natural texture coming from natural materials are left unfinished. However in some public facilities, minimal finishing are applied to ensure that the buildings are safe and will not injured the users. The uses of natural materials without any finishes and in natural colours, make the building blend in with its surroundings. Furthermore, the buildings create a friendly association with their surroundings. D. CONCLUSIONS The works of vernacular architecture without architects are considered as honest, spontaneous which creates its strong characteristics (architects in this discussion mean professional architects with formal architecture education). This, surely, is not to claim that the works of professional architects were not having a strong character but to emphasize that even without any formal education in architecture the works of vernacular builders still have a strong sense of distinct characteristics and friendly to their surroundings. In addition, the works of vernacular builders, fulfilled the needs of the people in their era. Spontaneous also does not mean that the works of vernacular builders were built without any planning. Vernacular buildings were built based on some principles although not as detailed and advanced as modern planning. Nowadays, the contemporary Balinese buildings are seen as the answer to fulfill the needs of tourism facilities. This new architecture style uses modern materials, some are imported from very far location, utilize modern technologies and modern principles. Balinese contemporary architecture creates a new paradigm which born from a mix of traditional and modern architecture. In its development, the concept of contemporary architecture has tried to involve nature and site at the center of its ideas. Climate considerations, culture, local genius and other aspects that are rooted locally are some considerations that have been taken into account. The uses of architectural morphology from the past, in this case vernacular Bali Aga architecture, have been flourished among architects. However, there are three basic things that come from past tradition that can not be implemented directly although some similarities can also be found. Firstly, vernacular buildings were built by non-formal architects while the modern styles of architecture were done by architect that are formally educated. Vernacular buildings were the product of traditional people to fulfill their basic needs of shelters while modern buildings were contaminated by the idealistic thought of their professional architects. An architect should leave his architectural ego if he want to blend in with his ancestors, the vernacular builders. By doing so, he will find the essence of vernacular buildings as have been built by his ancestors. Secondly, visual morphology cannot also be imitated by contemporary buildings from the traditional ones. Differences in function, location, time and culture are the caused. In the past, building materials can be taken from surroundings environment different from the situation today which all materials should be purchased in stores. In this case study, Balinese traditional architecture located in the mountains was built based on local characteristics of the sites. In contemporary situation, buildings can be built anywhere because technology helps difficult site to be easy to be built. Geographical factors are no longer treated as the main obstacles. Standard of comfort can be made and artificially modified with the help of technology as well. The function of vernacular buildings was only limited as settlement and its elements different from contemporary building which also function as hospitality facilities, offices, shops and other functions. Thirdly, vernacular buildings were strongly related to local belief and religious systems of its users. Cosmology still became strong
considerations influencing the form and pattern of houses or settlements. The effort to maintain the implementation of cosmology was also strong. The location where vernacular tradition born which is in the mountainous areas and far from the city keeps its tradition well maintained without or with small influences from out-world. One significant point of vernacular buildings is their harmonious appearance one to another. No single building try to dominate the landscape makes the overall cultural landscape associated friendly. In contrast, modern contemporary buildings do not consider religious belief as their main consideration. Buildings were designed and built based on economic considerations. Some analogies can be found, but not related to religious belief, imitates their surroundings to house modern functions. In conclusion, vernacular Bali Aga concepts can still be implemented in modern design with some modifications particularly which the spirit to blend in with its surroundings is still at the center of the design principles. The spirit to blend in can be translated through the uses of natural material, natural finishing, colours, technology and constructions. Bali Aga buildings were analogues with local belief of their occupants and “contemporary Bali Aga” buildings are analogues with their environment. Although some contemporary buildings using Bali Aga spirit seen as strange, eclectic, but a better understanding of the concept can make the design more beautiful, harmonious and create a friendly association with their surroundings. REFERENCES Arrafiani (2012) Rumah Etnik Bali, Griya Kreasi, Jakarta Creswell, John W (2014) Penelitian Kualitatif & Desain Riset : Memilih di Antara Lima Pendekatan, Pustaka Pelajar, Yogyakarta Davison, Julian (2003) Introduction to Balinese Architecture, Periplus, Singapore Gartiwa, Marcus (2011) Morfologi Bangunan dalam Konteks Kebudayaan, Penerbit Muara Indah, Bandung Gelebet, Ir. I N (1978) Arsitektur Tradisionil Bali: dalam Rangka Pengembangan Kepariwisataan, Universitas Udayana, Denpasar Oliver, Paul (2006) Build to Meet Needs: Cultural Issues in Vernacular Architecture, Architectural Press, Oxford Raharja, I Gede Mugi. Remawa, AA Rai. Ratnacora, Cok Istri (2007) Laporan Penelitian Dosen Muda : Studi Desain Interior Rumah Tinggal Tradisional Bali Aga (Bali Pegunungan), ISI Denpasar Rudofsky, B (1964) Architecture without Architects: A Short Introduction to Non-Pedigreed Architecture, Museum of Modern Art, New York Sachari, Agus (2002) Estetika Makna, Simbol dan Daya, Penerbit ITB, Bandung Soetiadji S. Ir. Setyo (1986) Anatomi Estetika, Penerbit Djambatan, Jakarta Wijaya, Made (2002) Architecture of Bali : a Source Book of Traditional and Modern Form, Archipelago Press & Wijaya Word, Singapore SPECIAL THANKS TO : Mr. Ketut Artana, the owner of Arte Architects and Associates, as the key informan Mrs. Kadek Mulyati, as architect staff of Arte Architects and Associates, who provides the important Puri Ahimsa and Taman Ahimsa’s documents Mr. Nyoman Gede Mahaputra, a doctoral student at Oxford Brookes University London, as the inspirator.