# IDEOLOGICAL STRUGGLE ON USE OF CONSTRUCTION MATERIALS BALINESE TRADITIONAL BUILDING IN ERA DISRUPTED

I Putu Gede Suyoga<sup>1</sup>, Ni Ketut Ayu Juliasih<sup>2</sup>

Sekolah Tinggi Desain Bali Denpasar<sup>1</sup> gsuyoga@std-bali.ac.id<sup>1</sup> Universitas Hindu Indonesia Denpasar<sup>2</sup> juliasihunhi@gmail.com<sup>2</sup>

#### **ABSTRACT**

Ecological ideology seems to be a unity in the design of traditional Balinese architecture whose main construction is made of wood. The provisions of wood which may or may not or are good and which are prohibited to be used as building materials have been regulated in Balinese traditional architecture. This article is a qualitative research with an interpretive descriptive approach. Literature study was carried out on the translation of the contents of *Asta Kosala Kosali, Janantaka* and *Taru Pramana* manuscript especially about wood as building material. Interviews from informants were chosen purposively. This study finally revealed the ecological ideology underlying the construction of traditional Balinese buildings, under pressure from market ideology in the current era. The market ideology as emic has suppressed ecological ideology as an element of ethics, so the scarcity of availability of several types of local wood in building materials is inevitable

Keywords: ecological ideology, market ideology, traditional Balinese construction.

## **PRELIMINARY**

The determination of various types of wood that may be used as the main material of a traditional Balinese building has been determined in the *Asta Kosala Kosali* manuscript. Provisions in the ejection have set wood for a hy sanctuary 'building, type of wood for 'bale and gedong' homes and types of wood that are allowed for kitchens and barns. *Janantaka* and *Taru Pramana* manuscript, also stipulated the same thing about the procedure for felling a tree whose wood would be used as building material.

Provisions in the last two papyrus are complete with felling techniques, direction of felling, the choice of a good day to cut, including various obstacles or threats that will accompany if the provisions are violated. In the *Wariga* provisions 'choice of days' which are used as a reference for the preparation of the *Saka* Calendar there are also rules regarding the provisions of the day for planting or harvesting / cutting wood to be used as building material.

Studies in the perspective of cultural studies see the existence of the power of ideology in ethical conduct contained in these palms, then how the emic in the praxis of Balinese life is interesting to be examined in the following discussion.

## **METHOD**

This article is a qualitative research with an interpretive descriptive approach. Literature study was carried out on the translation of the contents of *Asta Kosala Kosali*, *Janantaka* and *Taru Pramana* manuscripts, especially about wood as building material. Interviews from informants were chosen purposively namely traditional Balinese "*undagi*" building practitioners, clergy, cultural figures, and academics who have competence in Balinese architecture.

## **DISCUSSION**

Wood is the main building material in the traditional architecture of the archipelago as well as traditional Balinese architecture. The use of wood as the main building material has been arranged in a variety of traditional Balinese *undagi*. These various traditional design libraries reveal the understanding of wood from a philosophical point of view, classification of species according to their use for the needs of building materials for *Parhyangan* / temple, *Pawongan* / dwellings, and complementary buildings or warehouses, ethics of selection and logging and rituals from the beginning of the felling process, construction work until *pengurip* as a form of giving soul and spirit that the building is ready to be inhabited, even until someday the building will be replaced, demolished or shut down through the *pralina* rite.

The structure of a traditional Balinese building is composed of a series of wood combined with bamboo (taru weeds) and *taru gebang*, with naming according to their respective functions and ethics in traditional Balinese construction, as follows: *Saka* / Pillar, *Bale-bale* 'bed', *Sunduk bawak*'short beam' and *sunduk dawa*'long beam', *Waton*, *Likah*, *Galar*, *Parba* 'head bed', *Canggahwang* 'skuur', *Lambang-Sineb* main beam', *Pementang* 'middle beam', *Pemade* 'middle beam', *Pemucu* 'corner beam', *Petaka-Dedeleg* 'upper beam', *Tugeh* 'upper column', Ribs, and *Apit-apit*.

# **Timber That is Suggestion for Traditional Balinese Construction**

Wood according to *Janantaka*manuscript (Anom, 2009) and *Asta Kosali*manuscript (Pulasari, 2008) are derived from the word "*ka*" which means origin and "*yu*" which means mind, thus the word wood means "it is your wisdom that determines". The meaning of this understanding is the determination of the type of wood for a particular building, as well as the selection criteria for wood for building materials largely determine the "safety" of buildings and their inhabitants.

Determination of wood species qualifications for traditional Balinese building materials according to Swastika (2007), states that wood for *Parhyangan* includes: Cendana-Prabu wood, *Menengen-Patih* wood, *Cepaka-Arya* wood, *Majagau-Demung* wood and *Sureng-kayuTumenggung*. The wood for the house includes: *Prabu* wood, *Patih* wood, *Sentul* wood, *Pengalasan* wood, *Arya* wood, *Sukun Demung* wood and *Endep* wood *Tumenggung*. Timber for the kitchen include: *Wangkal-Prabu* wood, *Kutat-Patih* wood, *Blalu-Arya* wood, *Bentenu-Demung* wood and *Endep-Tumenggung* wood.

Classification of wood used for building materials both for *parhyangan* (temple &holy building), *bale* dwellings / housing, barns and kitchens according to *Janantaka*manuscript (Anom, 2009) outlines several types of wood that may or may not be used for building materials including: Classification of wood for *Parhyangan* material (Temples) include: *Prabu* - sandalwood, *Patih* - *Menengen*, *Arya* - *Cempaka Kuning*, *Demung* - *Majagau*, *Tumenggung* - *Suren*. Other woods in this classification are *taru menyan*, *taru pala*, *taru sasih*, *taru bujangga*, *taru singarcatur*, wood *sanya* (*sabo*), *jeminis*, coconut, *warulot*, *buni sari*, *taru sari*, *taru piling*, *gentawas*, *bayur*, *tanjung*, *sandat*, *ceroring*, fir; also bamboo such as bamboo *petung*, *jaka*, *lontar*, *ibud* and other fragrant flowering wood. Specifically for wood that can be used for *pratima*'sacred statues' include sandalwood (personification of *Parama Siwa*), *majagau* (personification of *Sada Siwa*), yellow *cempaka* (personification of *Siwa*), also can be used other woods: *menyan*, and *pala*.

Timber for *Pawongan* 'shelter materials' according to *Janantaka* manuscript include: *ketewel* 'jackfruit' - *prabu*, teak - *patih*, *wangkal* - *kanuruhan*, *sentul* - *pengalasan*, *benda* / *tehep* - *arya*, *sukum* 'breadfruit' - *demung*, and *timbul* - *tumenggung*. In other strata it is mentioned *prabu kepatihan*: *klampuak* - *prabu*, *juwet* - *patih*, *buni* - *arya*, *kaliasem* - *demung*, and *buluan* - *tumenggung*. *Kwanitan-petengen*: *juwet*, *bengkel*, *jempinis*, *bayur*, *bentenu*, *slampitan*, *adis*, *suniba*, *blimbing* 'star fruit', *talun*, *kayu buluh*, *kayu bawang*, *boni mawoh*, *klampuak*, *pala*, *gentawas*, and others.

Furthermore Janantaka manuscript also described Taru gulma and Taru gebang to supplement Pawongan's wood needs. The wood that includes Taru gulma; wood types of grass such as bamboo: petung, jlepung, santong, tamblang, buluh, ampel, baru, tutul 'spotted', tundak, gading, wori, tali and others. Taru gebang; a type of ental (lontar), jaka (palm tree), buah/jambe (areca nut), seseh (coconut), ibus, buyuk and others. Wood for granary material:

Prabu 'king'-pungut-pungut, blalu-patih, miding-mantri, katekek-prebekel and kutat (main). Various types of bamboo, taru gebang, taru buah (areca nut) and other woods that flower and bear fruit. Wood for kitchen materials: prabu-wangkal, patih-klampuak, mantrti-juwet, kutat, other taru gulma, gebang (coconut, taru anom, taru buah/areca nut), taru pucangan, and other wood that is flowering and bearing fruit. Timber for door material is determined from various types of wood that are classified as middle-aged wood including kalikukun, kalimoko, klicung, and kaliasem.

On the other hand it is believed that the mistakes of Balinese people in choosing building materials that store *durmanggala* (bad signs or signs) are believed to lead to irregularities (misfortune). *Durmanggala* is the cause of *kadurmanggalan*, that is, bad signs or signals from building materials that will cause various kinds of misfortune and danger for the owner or its occupants, so it is very important to understand the ethics of what kind of wood is permitted or prohibited which will affect both the or bad if used for *Parahyangan*, *Pawongan* functions and other complementary buildings such as kitchens, barns and *kori*/gate.

The role of wood is so dominant in a traditional Balinese building because the main structure of a traditional Balinese building is made of wood, so that it is absolutely necessary to cultivate methods for future development. Apparently this kind of thinking has long been considered by the *undagi* of the past so that the application of ethical aspects in Hindu teachings is contained in the concepts of preservation of wood, including technical and non-technical rules in the use and processing of wood as building material. Ethical guidelines which have crystallized into morality or values are described in various parts of the palm and united in the implementation of various religious ceremonies (rituals).

#### Timber That is Prohibited for Traditional Balinese Construction

The teachings of Hindu ethics provide good and bad guidance, permits and prohibitions in the use of wood as building material. Because, in essence, mistakes in choosing building materials that store *durmanggala* are believed to bring about *kadurmanggalan*. *Durmanggala* means sign or sign that is not good, while *kadurmanggalan* means misfortune. Dwijendra (2008) states that *durmanggala* is the cause of *kadurmanggalan*, which is a bad sign or signal from building materials which will lead to various kinds of misfortune and danger for its inhabitants, therefore avoid the use of wood that does not meet the conditions as stated below:

- 1. *Brahmasesa*: wood material leftover from fire that is re-used for new building materials or other buildings. This can cause residents to live in concern and misery.
- Nguripwangke: buildings are built from wood scraps from collapsed buildings for no apparent reason. This event can cause its inhabitants to suffer from lethal fatigue and all the work done causes misfortune.
- 3. *Poman Pamali*: buildings built of wood that grow on the edge of a cliff or cliff. This can cause the inhabitants to suffer from strange diseases.
- 4. Sesawadung: Timber building material which is remnants of the previous cut. This can cause the occupants to get misfortune and illness so that they often die suddenly.
- 5. Anepiluwah: Buildings whose wood is taken from trees that grow on the banks of a river. This event can cause the occupants to suffer from excess fluid.
- 6. *Candragni*: buildings whose wood is taken from trees that grow in the family worship / place of worship. This condition can cause the inhabitants to be shunned by fortune.
- 7. *Bhutagrha*: buildings whose wood is taken from trees that grow in graves. This condition can cause the inhabitants to experience strange things and often act like crazy.
- 8. *Pamali Wates*: buildings whose wood is taken from a tree that grows in the middle of a wall or divider between yards. This can cause its inhabitants to be short-lived.
- 9. Asurigrha: Buildings whose wood is taken from trees that grow on the edge of a pond or lake. This can cause the occupants to experience mind shock.

- 10. Bhutangandang: buildings whose wood is taken from trees that grow across the road. This condition can cause the inhabitants to suffer bad luck, misfortune and various diseases.
- 11. *Bhutasungsang*: buildings whose wood is taken from a tree that when felled falls upside down. This can cause the mindset of its inhabitants to often be reversed, various problems will arise and threaten their lives.
- 12. *Ngempelwe*: buildings whose wood is taken from trees that fall across the river. This condition can cause the occupants to get excess fluid.
- 13. *Nganyutdana*: buildings whose wood is taken from trees washed away by rivers or floods. This will cause the inhabitants to live a difficult life, extravagance, and various diseases will arise and difficult to treat.
- 14. *Sinambergelap*: buildings whose wood is taken from trees hit by lightning. This can cause the occupants to be threatened with sudden death.
- 15. Cindagapati: a building whose wood is taken from a tree which when it is cut down between the base / stump and its felling remains attached even though it has broken off from its lower trunk. This condition can cause its inhabitants to be in danger of scaling-up and physical undermined by diseases that cause slow death.
- 16. *Rubuhinpati*: a building whose wood is taken from a tree whose body falls on a sliding wall. This can cause the inhabitants to live in the threat of sudden death.
- 17. *Nyangglegyusa*: buildings whose wood is taken from a tree whose body rests on another tree. This can cause its inhabitants to be short-lived.
- 18. *Rubuhbayu*: buildings whose wood is taken from trees that are falling down by strong winds. This condition can cause occupants to suffer from weakness without effort.
- 19. *Bayukabancut*: buildings whose wood is taken from trees that are collapsed by a tornado. This can cause the occupants to suffer sudden sudden loss of energy, fainting and weakness.
- 20. Rangesegara: buildings whose wood is taken from trees / wood that float in the ocean. This can cause residents of mental illness, loneliness as if left by his spirit.
- 21. *Larapati*: buildings whose wood is taken from trees or wood left over by a landslide. This can cause frequent occupants misfortune and illness.
- 22. *Rebutkala*: buildings whose wood is taken from haunted trees. This can cause residents to suffer throughout life.
- 23. *Karnasula*: a building whose wood is taken from a tree which when cut down makes a loud sound like a block. This condition can cause the occupants to be stricken by slander.
- 24. *Sagagak*: buildings whose wood is taken from trees which are often occupied by crows. This can cause the occupants to experience bad luck and poor luck.
- 25. *Gniangabar*: buildings whose wood is taken from a dead tree without cause and the trunk is still standing. This can cause residents to experience a deadly heat illness.

Anom (2009) further states that some wood which is not recommended for use in building materials includes:

- Taru tan masekar jeg mawoh, lan taru masekar ambunia pengitalid: Wood derived from trees that do not flower but bear fruit, also wood from trees with foul-smelling flowers. This tree is often inhabited by demonic: Bhuta Kala Dengen, Banaspati, Jin, Satan or Memedi. These wood types include Bunut, Beringin 'banyan tree', Aha, Taru Tahi-Tahi and so on.
- 2. *Kelayonan* wood lumber: building material wood is located in the area of the yard when the ceremony of death is being carried out, the wood is not good for the building, but if the wood is moved or placed in a refute / merajan then building materials may be used.

- 3. *Masocamanemusunduk*: wood eye right with a hole in a duck *sunduk 'bale beam'*, if used as a pillar / *saka* material is called a defect.
- 4. The main container of the *atiwa-tiwa* wood: used wood bearing bodies or death ceremonial equipment, called *leteh* is strictly prohibited, especially for building shrines, barns and kitchens.
- 5. Laad Bale wood may be crew members: wood from former bale / buildings that collapsed on their own, lethargic is not allowed to bale again.
- 6. Sisaning bale puwun wood, shiny sander: wood from a former fire, struck by lightning, lethal material is prohibited from use.
- 7. Taru embud hati: wood split / broken itself in the middle of the stem, not good for the material.
- 8. It is forbidden to use wood used as house building for temple materials, barns, kitchens, and vice versa wood used for temple should not be used for house building materials, very dangerous!
- 9. Sudukrabi wood: wood from trees whose stems are pierced by other tree trunks.
- 10. Tunggak semi wood: wood grows on the rest of the logged-over trunk.
- 11. *Nyuh*, *buah*, and *jaka mecanggah*: Coconut trees, betel nut or branched sap are not good for building materials.

## **Bali Ecological Ideology for Preserving Timber**

Ideology in the view of Takwin (2003) citing Eagleton (1993) reveals some understanding that can be used to direct the understanding of ideology in this study. Relevant ideological understandings include: (1) the process of producing meanings, signs, and values in social life. (2) a set of characteristics of ideas or thoughts from a particular group. (3) thinking about identity. (4) the end of meaning in the semiotic process.

Thus the ecological ideology in the *Asta Kosala Kosali, Janantaka, Taru Pramana*manuscript can be understood to be very closely related to environmental management in its three components in the praxis of traditional Balinese society. The environment, according to Salain (2001), consists of three components, namely natural environment (ecosystem), residential environment (techno-system) and social environment (socio-system). The three components of the environment (ecosystem, ecosystem and socio-system) interact with each other, adapt, and experience selection through the exchange of material, energy and information. The ideal environment can only be achieved if the three components of the environment are in balance. The existence of plants as part of an ecosystem has a very important role in maintaining balance with other components. Its presence in the ecosystem can be influenced and affect the ecosystem or sociosystem, or vice versa, like a reciprocal relationship.

The Tumpek Wariga celebration as an "otonan" (birth day) of all types of plants is a manifestation of the Balinese community's ecosystem in the way they view and appreciate their ecosystem and ecosystem. In its position as a sociosystem, both as an object and subject, in Bali known as I am you, you are me "tat twam ation". They are aware that exploiting ecosystems and ecosystems must be done wisely and wisely or in accordance with their carrying capacity. So the deepest meaning of Tumpek Wariga as the birth day of the "oton" of plants is that the Hindu community in Bali recognizes its existence and its interrelationships. That is, if humans act arbitrarily against it, there will be an imbalance in the environment. Likewise plants with renewable living things will not be productive if there is no good maintenance and rejuvenation (Salain, 2001).

The meaning of the implementation of the ritual of the *Tumbek wariga / pengatag / bubuh / uduh* or other terms which basically means humans as *bhuana alit* respects the plant as the representative of the *bhuana agung* and as a form of gratitude towards God Almighty in its manifestation as *Sang Hyang Sangkara* (Sumarta, 2006). The praxis, humans must always preserve a variety of flora not only for the needs of building materials, but for the survival and welfare of life now and future generations of children and grandchildren on this earth.

The provisions of *Asta Kosala Kosali, Janantaka, Taru Pramana* manuscripts subtly require Balinese to preserve various types of related plants for the needs of building materials in the construction of *Parhyangan, Pawongan* or complementer buildings from generation to generation. This is contained in *sloka* that regulates the classification and qualification of wood for each of these designations, ethics and code of conduct in felling, the direction of felling at the time of felling, the times of choice for felling / felling based on *wariga*, prohibitions on the use of certain tree species and which grows in certain places, as well as various socio-systems in Balinese society that lead to an expression and at the same time implementation, how should preserve the plants and develop them for the welfare of human beings on this earth.

Provisions regarding the direction of felling of a tree when it is cut means that if it does not meet good requirements or is not possible to be cut down, it will be allowed to continue to grow or in other words the tree will remain alive, so indirectly the tree has the potential to preserve soil (lithosphere) "Anantaboga dragon"), water (hydrosphere "Basuki dragon") and air (atmosphere of "Taksaka dragon").

Semiotics, in the view of Danesi (2011), when a tree felled has fallen, then the *tuwed* (core of the wood) will be planted with a tree branch as a *sawen* (sign). *Sawen* implicitly "ordered" (markers) to the woodcutter and or whoever, to replant (at least) one new tree as a substitute for the tree that was cut down. The meaning (signified), by always trying to restore what has been taken, the preservation of nature will be maintained.

To always be able to maintain a balance with nature, the utilization of natural resources, and also in maintaining its integrity, must follow certain regulations and regulations. The rule is known by the Balinese Hindu community as *Wariga*, which is understood as "a good day to do something, and or not do something". Simply known as *pedewasan*, or some kind of guide which in Balinese is better known as *ala ayuning dewase* 'times'.

Arwati (2007) states that the ethical guidelines regarding the eradication of 'good and bad days' to plant something (plants) according to the day concerned (nandur manut saptawara), are as follows: Sunday / Redite: Planted plants (bamboo, sugar cane, galangal, and other); Monday / Soma: Bulbs / palabungkah (yams, taro, etc.); Tuesday / Anggara: Plants whose leaves are taken (betel, spinach, banana, etc.); Wednesday / Youth: Flowering plants (ylang, cempaka, henna, and others); Thursday / Wrespati: Seed plants (rice, corn, etc.); Friday / Sukra: Fruit / palagantung plants (coconut, ceroring / duku, papaya, etc.); and Saturdays / Saniscara: Vines / gardening (bitter melon, cucumbers, pumpkins, melons, etc.).

In addition to paying attention to the days of the week in planting or harvesting, we must also pay attention to other "signs", for example ingkel. Examples of its implementation, it is not permitted to cut the species of tree-cropped (bamboo, sugar cane and others) on the book ingkel, or may not plant trees on the tingkel ingkel. Padewasan 'good-bad day' is indeed something complicated, but behind the complexity of the hidden practice of meaning is that humans are very dependent on the existence of these trees. Plants are a source of food, building materials (Janantaka palm, Kosa Kosala Kosali, and others), to medicine sources (there are at least 168 types of medicinal plants according to the Taru Pramana palm); and last but not least this breeding system will provide enough time for the trees to grow and multiply.

The next norm guideline in ejection of Asta Bhumi regulates the procedure for felling wood as building material (Suastika, 2007), it is stipulated that attention should be paid to the direction of wood collapse when it is cut down because it can affect the craftsman who works on it and its inhabitants, so as to avoid things that are not good then you should pay attention to the provisions in the direction of felling timber as follows:

- 1. East / Purwa: good, find the pleasure of working and find the goodness of its inhabitants.
- 2. Southeast / Ganeya: ugly, residents get suffering
- 3. South / Daksina: poor, short working age
- 4. Northwest / Wayabya: Very ugly, a great sin changer who works
- 5. West / Pascima: Ugly, who works as an exchange
- 6. Southwest / Nreti: Good, Family finds good
- 7. North / Uttara: Very good, find good luck working and residents find good
- 8. Northeast / Airsania: Excellent, longevity, those who do get pleasure, family gets good

Discipline of the practice of implementing the provisions (EMIK) is expected to produce a building material that is suitable for use, and on the other hand only trees that meet the cutting requirements will be felled, while others will continue to grow and have excellent potential in maintaining ecosystem sustainability.

There is a restriction in the form of a ban on cutting trees within a certain distance from the border of the river or river border, which technically the tree trunk will have a high water content so it does not meet the requirements for construction materials, because it will tend to shrink and expand in the subsequent process. Prohibition of using wood for building material from trees that grow on the edge of a cliff / cliff implicitly the positive message being delivered is the tree in this location to stay alive and potentially keep the cliffs / ravines or soil from erosion scouring in addition to functioning to bind water, fertilize the soil, and maintain clean air / produce O2.

The ecological ideology spirit that can be interpreted from the use of black / white checkered poleng / cloth tackles on a tree that grows in a haunted place, near springs, holy places and other sacred places is that certain trees which tend to be old and rare will continue to grow, while maintaining the source of spring water and soil fertility. A large tree with a root system that is wide enough and affects the ground water cycle is not completely cut down for building materials.

# Market Ideology on the Utilization of Wood as a Bali Building Material

Ideology as an experience that is lived everyday and is a set of systematic ideas that play a role regulating various social elements and bind them together, acting as a social binding in the formation of hegemonic and counter hegemonic groups (Barker, 2005: 80). This understanding broadens the understanding of ideologies that evolved over time, common sense becomes the most important ideological battle ground, because it is a place where things are "accepted as fairness", a practical awareness that guides daily actions.

Althusser's view (Barker, 2005: 84) which sees ideology as a justification for the actions of all human groups seems to be appropriate to the present phenomenon of Balinese society in the selection of building materials, namely the development of market ideology. The progress of the capitalist era economy has driven rapid development including traditional Balinese buildings, in the form of renovations or new developments for *Parhyangan*, *Pawongan* and *Palemahan* buildings so that wood is needed as a material that exceeds the availability of local materials. On the other hand, there is no denying the fact that not all people have large tracts of land, *teba*, or dry fields to plant local wood trees that will be used as building materials in line with the increasing economic value of land for business (commercial) or residential (domestic) today.

This has become a factor in choosing alternative non-local wood uses. Utilization of capitalist industrial wood materials, such as *kanver*, *kruing*, *bangkirai*, etc., although still taking into account the classification of durability and strength of the wood by converting it logically to the provisions of the traditional Balinese divisions. Another approach that is often taken is to continue to use wood according to traditional provisions as "*jatu*" that is used or installed in the main position for example at the top (*petaka* and *dedeleg*), while industrial wood as another complement.

Utilization and selection of wood types for traditional building materials have indeed changed in their continuity by using wood materials produced by capitalists, but the application of the anthropometric unit size measurements or *sukat* homeowners or "elder" people remains a reference in underpinning the size of each building component used will be made. An application of ethical aspects in the form of respect for parents or elders in the strata of the family, or *sukat* stakeholders or *sulinggih* 'saints' in a building construction temple (shrine) or a spatial structure of the traditional village.

Likewise, the technical rules for placing the base of the tree in the lower position of the pole and the top part of the shoot, are still being carried out, as a form of ethical application of *ulu-teben* (the top-bottom). The selection and use of good quality woods such as little eyes, cracks / cracks, avoiding holes in the purity of the eyes and so on are still carried out as

fundamental provisions in the technical work of traditional Balinese timber that is loaded with morality and ideological values.

Ceremonies or rituals as a unity of the initial process up to the 'soul giving' building pengurip-pemaspas building continues, although sometimes the whole ritual is performed at the end of development (the influence of the modern era that emphasizes practicality), causing the giving of the spirit of the divine spirit and uniting with the owner or its inhabitants are 'real' and noetic 'idiot' continue to run according to customary provisions and religious values, so that the meaning of each stage of the construction ceremony continues to be carried out as a development ethic in Bali in the form of requests for permission, proclamation, cleansing, purification, giving of souls and integration with the owner or user of the building. Architecturally, this ritual is meaningful as a form of construction certainty that is strong, sturdy, and functional in every stage of building construction, so that the building is ready to use physically and mentally or physically and psychologically for the owner / occupant.

Market ideology greatly influences the mindset and code of conduct of the Balinese people who will develop at this time. The ease and availability of alternative wood for building materials, replacing local wood materials has triggered a reluctance in efforts to replant or cultivate local trees according to the types of wood classification in the palm of Bali texture. The scarcity of certain tree species is already felt today as a result of the strong development of market ideology, besides the limited land for cultivation is increasingly adding to the marginalization of local wood in the development of Bali.

This condition can still be improved by increasing the participation of all parties (stakeholders) in developing a commitment to revitalize the role of local wood in development in Bali, with the initial step of cultivating local wood by the forestry service, plantation service and others, then spreading the seeds to the community to be planted in community owned lands, customary lands, village forests, botanical gardens, and state forests, so that Bali does not lose its local wood species as the identity of building materials.

## CONCLUSION

Various traditional architectural designs as ethical elements, such as *Janantaka, AstaKosala-Kosali, Asta Bhumi*manuscript and others, express the understanding of wood from a philosophical angle, classification of species according to utilization for the needs of *Parhyangan* 'sacred' building materials, 'shelter', and complementary buildings, the ethics of selection and logging, as well as rituals from the beginning of the felling process, construction work up to *pengurip* as a form of spirit and spirit that the building is ready to be inhabited, even until someday the building will be replaced, dismantled or ethically killed through *pralina* rites. The various holy books contain technical aspects as well as ethical aspects as the embodiment of values, morality of Hinduism.

Provisions regarding the direction of felling of a tree when it is cut imply the message, that if it does not meet good conditions or is not possible to be cut down, the tree will be allowed to continue to grow so that the tree will indirectly survive and have the potential to preserve soil, water and air which will sustainably benefit future human generations. A manifestation of the noble ecological ideology "tat twam as".

Ecological ideology can also be understood from the provisions of the *Asta Kosala Kosali, Janataka, Taru Pramana* manuscripts, and others to subtly "require" the Balinese to preserve various types of plants related to their use for building material needs both for the construction of *Parhyangan, Pawongan* or complement buldings, including food plant needs, medicinal plants from generation to generation are maintained and sustainable.

The capitalist era market ideology with industrial wood production substituting local wood species as Bali building material, has put pressure on efforts to preserve certain types of wood for traditional Balinese building materials. The community is reluctant to cultivate local wood according to the above manuscripts provisions, because it is more practical (modern lifestyle) with the alternative to consume it from the commodity market for building materials. Market ideology as an emic has suppressed ecological ideology as an ethical element, so that the scarcity of the availability of several types of local wood building materials is inevitable.

## **REFERENCES**

- Anom, Ida Bagus. 2009. Ngwangun Parhyangan Lan Paumahan. Denpasar: Widya Dharma.
- Arwati, N.M.S. 2007. Upacara Bercocok Tanam Padi di Sawah. Tanpa penerbit.
- Barker, Chris. 2005. Cultural Studies. Teori dan Praktik. Yogyakarta: PT. Bentang Pustaka.
- Danesi, Marcel. 2011. *Pesan, Tanda, dan Makna. Buku Teks Dasar Mengenai Semiotika dan Teori Komunikasi.* Yogyakarta: Jalasutra.
- Dwijendra, N.K.Acwin. 2008. Arsitektur Rumah Tradisional Bali, Berdasarkan Asta Kosala-Kosali. Cet. Pertama. Denpasar: Udayana University Press.
- Pulasari, J. M., J. M. Sampun W., J. M. Suasta S. dan J. M. N. Artana. 2008. *Cakepan Asta Kosala-Kosali lan Asta Bhumi*. Surabaya: Paramita.
- Salain, P.R. 2001. *Tumpek Wariga Sebagai Usaha Pelestarian Lingkungan Hidup di Bali.* Wahana No. 33 Th. XVI Mei 2001: 22-24.
- Suastika, I K. 2007. *Asta Kosala Kosali, Asta Bhumi, Eka Pratama, Dharma Kahuripan.*Denpasar: Dinas Kebudayaan Propinsi Bali.
- Sumarta, I K. 2006. Puncak Peradaban Bali Bernama Tumpek. Sarad No. 77 September 2006: 16-18.
- Swastika, I K. P. 2008. *Upacara/Upakara Paumahan Lan Mrajan*. Cet. Pertama. Denpasar: Kayumas Agung.
- Takwin, Bagus. 2003. Akar-akar Ideologi. Pengantar Kajian Konsep Ideologi dari Plato hingga Bourdieu. Yogyakarta: Jalasutra.