
READING THE RELIEFS OF BOROBUDUR BUDDHIST TEMPLE: A LESSON OF BUDDHIST ETHICS FOR SUSTAINABLE ENVIRONMENT

Ida Bagus Putu Suamba*

Department of Business Administration, Politeknik Negeri Bali, Indonesia

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Abstract

This study attempts to reveal the ethical values on ecology depicted on the reliefs of the Borobudur Buddhist temple. Some of the reliefs of the main walls and balustrade of the temple of *kāmadhātu*, *rūpadhātu*, and *arūpadhātu* are taken as the object of study, using qualitative approach. It is found that the relief shows some elements of nature and the relationship with each other in a whole unit of a panel. Each panel is connected with others either with stories and the philosophy of Buddhism. Here, we can read about the values of ethics and the law of cause and effect that can be used to address environmental issues. The analysis was done from the view of culture and environment. The relatedness of panels as manifestation of the law of dependent origination (*pratītya samutpāda*) amongst the elements is shown beautifully in complex ways using figures of humans, semi-gods, animals, various plants, instruments, houses, etc., and this point has ethical, aesthetic, spiritual, and ecological messages for spiritual development. When the interaction amongst them should be accomplished, an ethical principle is established as how to maintain harmony with those elements for a better world order and a happy life. The novelty of the study that this attempt has thrown light on the importance of Buddhist environmental ethics in guiding humans to interact with nature in a broader sense.

Keywords: Borobudur, Mahāyāna Buddhism, relief, ethics, nature

1. Introduction

The Borobudur Buddhist temple of Java, Indonesia is a silent witness of the spreading of Buddhism in ancient pre-Islam Java; it is known as the biggest complex of Buddhist temple in the world, and the climax of Buddhist art [1]. Being “a prayer in stone” [2] and landmark of Javanese art and culture, its spiritual grandeur welcomes every visitor [3]. It is ‘a must-see site’ for whoever visits Central Java especially Buddhist pilgrims or lovers of arts and wisdom. The temple represents the deep philosophy and art of Mahayana Buddhism, as can be seen from its architecture and reliefs on its walls and balustrades. Gupta further mentions that as it is symbolic in nature, with its wealth of beautiful reliefs and

* bagusputusuamba@pnb.ac.id

hundreds of sculptures of the Buddha, it may be assumed that Borobudur is not just a monument but expresses a philosophy, no less complex a subject than the very meaning of existence. It represents the cosmos the world of the Buddha – Dhyani Buddha and Bodhisattvas; a place of meditation and guidance, where *bodhisattvas* show the path to higher knowledge [1, p. 371-372]. From the bottom to the top the Borobudur is full of philosophical, religious, and spiritual messages conveyed in tons of stone. Borobudur stands on top of the mountain known as Manoreh, surrounded by the mountains of Merapi, Merbabu, and Sumbing at a great distance. So, from the beginning, Borobudur temple was not only in and with nature, but its reliefs and the entire building portrayed the biodiversity of nature, human beings, and gods; each of them interacting in the light of the Buddha. Having this point as the basis, a deeper study on the issue of ecological ethics not only important but has an essential significance exploring Buddhist ethics in sustainable environment.

Constructed in 8th-9th century by the Sailendra dynasty, there are ten levels (*daśa bhūmi*), and the walls of its *kāmadhātu* and *rūpadhātu* are decorated with bas reliefs displaying stories of the Buddha, which are approximately 2,500 meters in length, and hundreds of Buddha statues. Meanwhile Chandra [3, p. 138] states that its system of philosophy has been interpreted in the context of the *tri dhātus*: *kāmadhātu*, *rūpadhātu*, and *arūpyadhātu*, as found in the *Abhidharma-kośa*. The *kāmadhātu* has six planes of existence: hell, animals, ghosts (*prēta*), demon (*asura*), men (*manuṣya*) and gods (*dēva*). The *rūpadhātu* has four *dhyānabhūmis*, while the *arūpadhātu* is inhabited by *arapavacara* gods [3, p. 138]. As Suamba shows how ancient Javanese produced such high aesthetic, ethical, and ecological values unparalleled in the history of this country, immortalizing the faith and vision of the kings and people inspired by the Buddha [4, p. 19]. The work constructions of the Borobudur were successfully accomplished in many periods when technology used was still simple, but the spirit to complete it was so high and amazing. Sedyawati suggests that there was an underlying genius of innovative ideas behind it during its time of planning and construction in the past [5, p. 1] After all, the concept underlying the whole monument is the most important principle worth to explore.

Throughout the history of Buddhism from its inception, the Buddha is often associated with nature; and Borobudur temple depicts it in stone art. After the Buddha had attained enlightenment, he spent much time in nature in the presence of with trees, faunas, rivers, and open space. He met various people in different places in India. Singh mentions that various episodes in his life, such as his birth at Lumbini as his mother grasped the branch of a *sal* tree, his early experience of states of meditative absorption beneath the rose apple tree, his Enlightenment beneath the *bodhi*-tree, and his *parinirvāṇa* (death) between twins of *sal* tree [6] in Bodhagaya in India, all show that the life of the Buddha and nature are inseparable. Most of his life, especially after leaving the palace, was spent in the open air, like forests, gardens, groves, caves [7] and villages on his spiritual journey. He left his teachings to guide or inspire for humanity, and he did not want his followers to regard him as a spiritual master (*guru*). After all, he was a great traveller, who travelled thousands of miles by foot to propagate the *dhamma*

among the masses. In *Maha Mangala Sutta*, he recommended to live in proper environments as a great blessing: “*patirupadesavaso*” [7]. At the Borobudur monument, some elements of nature are shown representing the richness of flora and fauna on this tropical land. Accordingly, there are many Buddhist temples (known as ‘*candi*’) that are built close to nature, e.g., near mountains, forests, on the banks of rivers, etc. However, as remarked by Singh, Buddhist practices tend to disregard environment, because the monastic way of life idealized by Buddhism is environmentally very minimalist. To say that concerning environmental values were neglected is not warranted, however, because the Buddhist scriptures are in fact rich with advice from the Buddha regarding environment values, and they are applicable to monastic and lay life style alike [6, p. v]. This view is taken later when monastic orders were also interested in helping society and nature to be fruitful for our life.

In modern times, an anthropocentric approach is adopted to look at the nature, and all the living beings in their natural diversity are perceived as resources, useful for humans but not in and of themselves. This causes an imbalance in the relationship between humans and nature, since gaining from nature is too much without sufficient even no giving to nature just for satisfying unlimited desires. In line with this view, as stated by Dwivedi that sustaining our way of life and our individual habits of mind are basic elements of a democratic society that should be tolerated and sustained, even if it entails our being cruel, our polluting the biosphere, our driving to extinction other life forms, and our declining quality of life. It is taken as a matter of fact that humans pay little or no attention to the non-human domain of flora and fauna. Such an attitude has led to atrocities perpetuated by humans against ecology and to the tremendous loss of natural beauty and diversity [8, p. 41]. For a society where freedom is highly worshipped, freedom of nature to exist as such is also accordingly respected. The massive advancement of science and technology has alienated men from self and nature. The use of high technology in communication should not ideally separate people but connect them for peace and the highest good of life. Surprisingly, the relatedness of man and nature becomes less and less while problems caused by ecological imbalance exist almost in all countries. Joyadip [9] mentions that we cannot divorce man from nature and his surrounding living creatures. Therefore, we have to understand our existence not as isolated but as a part of the larger body of the universe. Egoism generates negative emotions like greed, hatred or anger, and delusion (*rāga, doṣa, moha*), making us run after wealth, fame, power, and sensual gratification. As long as man is motivated by these drives, he can never feel safe and contented. Delusion blinds us from seeing the truth [10]. These are of course wrong ways of thinking and living, which are opposed by the teachings of the Buddha. The Buddha’s attitude to such views is against such an anthropocentric view of nature. Suamba mentions that the Borobudur temple is not merely a huge stone construction but a blend of art, philosophy, and nature. The natural environment is very obvious depicted in its reliefs. The three levels of the world are in correspondence with three states of mind, as usually found in Buddhist cosmology. There is an ascending process from the lower to the higher

state of mind, or from outer part to inner part of existence [4, p. 21]. The Borobudur shows this ascendance in spiritual journey.

With reference to biodiversity or vegetation, there have been studies conducted to reveal the kinds of plant, fauna and the context in which they depicted. As mentioned [11], that the study conducted by the Yogyakarta Archaeological Center Team (2000) to study on the plant. Later, the Borobudur Conservation Center (2005-2006) had done study related to the potential of flora. In 2007 the same body also conducted study regarding the identification, analysis, and interpretation of plants at Prambanan and Sojiwan Temples. In brief, it can be said that the study mentioned above is a study that departs from the identification of plant reliefs which is then interpreted to reconstruct the Old Javanese environment, especially regarding vegetation and plant cultivation. Metusala [12] studied on identification of plant reliefs in the *Lalitavistara* story of Borobudur temple. Further, Metusala [13, p. 387] noticed that the depiction of biodiversity in the art of Borobudur temple does not only show the richness of nature in that period, but also became valuable historical evidences about perspective and the relationship of human with environment. He, further states that immense biodiversity especially plants, can be understood by Old Javanese society as a real manifestation of elements of beauty, welfare, blessing, fertility, and abundance, and at the same time definition of ideal environment. It is obvious that Old Javanese society appreciate nature very much the sustainability of biodiversity as other form of communal wealth they had. However, there has likely not been studies exploring the Buddhist ethics connecting with its flora and fauna.

The Borobudur Buddhist temple as a representation of Buddhist philosophy, ethics, and culture is worth studying when an increasing number of ecological problems are faced by almost all countries in the world. There are many lessons teach us like biodiversity, philosophy, religion, sciences, and arts. The Borobudur temple has a huge number of bas reliefs on its walls from the bottom to the top, depicting a particular aspect of Buddhism. Since the Buddha is associated with nature, the panels are very rich with elements of nature. To know the ideas of Buddhist ethics for sustainable environment behind the rich reliefs of the Borobudur is an interesting matter that should be attempted when no such serious study had been attempted to do so. The lesson is required when awareness of the importance of nature in the totality of life is increasing. So many environmental imbalances devastate humans; even the destruction of nature threatens the world in which some animals or insects and plants may be destroyed or disappear due to wrong human action and global warming.

2. Method

This study used qualitative approach and empirical observation on the field. Related panels or reliefs of the Borobudur temple were identified amongst those thousands of reliefs. Data was gathered through direct observation in the temple and reading from some photos issued by the Balai Konservasi Borobudur, which reveals the data of environmental ethics. With the help of camera data were

selected, categorised, and analysed to reveal the issues on environmental Buddhist ethics.

3. Result and Discussion

3.1 The Bas Reliefs

With reference to Javanese classic period, relief is a form of decoration contained in architectural works in the form of temple buildings, holy bath (*petirtān*), caves, *pundèk* terraces, gates and others. In a broader sense, relief is part of building architecture. Besides having aesthetic value, reliefs also have symbolic-religious value and can determine the religious identity of an architectural work. In general, reliefs are carved on a flat plane, both on the legs, body, roof of the building, as well as on the parts of the building which act as a form of harmony in the temple building [11]. It can be the form of individual and in a series of panel connected by central theme of story or philosophy hidden behind. The theme is usually connected with the religious belief at the same coloring the kinds of a temple.

In general, the reliefs or panels of it can be divided into three categories, namely decorative, narrative, and the combination of them. For a Buddhist, the spiritual journey from the bottom to the top represents the ascendance in spiritual life; it is an abstract teaching in tons of stone which every lay person can feel. The reliefs in all galleries are full of messages reminding everyone to reach the highest goal of life, i.e. *nirvāna*. However, only a keen Buddhist pays attention to such an important message. For a lay or common person, who does not have capability to read texts like *Lalitavistara*, looking at the relief in series starting from the right has the same function as reading a text. Hence, the Borobudur is not only a prayer but a text in stone, the form of fine art. With this attempt, the king and his people tried to bring the message to the masses and hoped that a spiritual realization would happen in every individual for the goodness of all. Looking at the entire building can also be regarded as a reminder for the visitor about the deep philosophy of Mahayana Buddhism in a three-dimensional object. Practically, reading the relief can be done in a clock-wise direction (*pradakṣiṇā*) or anti-clock-wise direction (*prasavya*) on all sides of the building. In other words, it teaches us step by step progress from the lowest level, i.e., *kamadhatu* or *prambudi* to reach the highest goal, i.e., *dharmamegha*; the levels are shown in the form of symbols and stories depicted in the reliefs of walls. Frederic and Nou mention that the narrative reliefs that ornament the walls and balustrades on Borobudur's galleries – 1.460 in all, of which 160 are on the 'hidden base' – have intrigued scholars since their discovery in 1814. They are combined of a length of more than one- and one-half miles (2,500 m), an outstanding gallery of narrative that is unique in all the world [14]. This *mahākarmavibangga* part attracts scholars to reveal its deep meaning; unless this is understood well, there is no point going further for a spiritual seeker.

There are hidden messages that require knowledge and skills to interpret them. Of the various symbols, some concern on environmental ethics, as so many

figures depict plants, trees, forests, rivers and fauna, and most essentially the interaction amongst those elements. Even though they are animate objects, the panels show stories and convey messages. Suamba mentions that since it is art in nature, it is a form of cultural ecology. As such, the monument is indeed rich in symbols depicting various aspects of nature, flora, fauna, human beings, gods, goddess, kinnara (semi gods), etc. A Buddhist pilgrim, looks for a spiritual dimension for self-transformation [4, p. 21]. Common people may enjoy its siren and beauty. As remarked by Miksic the Borobudur provides a place where Buddhists could physically and spiritually pass through the ten stages of development that would transform them into enlightened *bodhisattvas*. This transformation was the monument's main purpose, and both the overall design as well as the stories portrayed on the Borobudur's relief are connected with this theme [15, p. 39]. This will teach especially the pilgrim that the physical Borobudur should be seen from its spiritual or philosophical dimension in one's self-transformation, otherwise the Borobudur will be seen as just a meaningless monument, with its beauty and grandeur. With its greatness and depth in philosophical message, the Buddhist can proceed faster in spiritual progress. In another way, the Borobudur is a reminder for those who are feeble in spirit due to being bound by the gratification of the senses as revealed in the very first relief, i.e. *mahākarmavibangga*. The message of the builder in the past is to be used as guidance for the Buddhist in reaching the perfection called *bodhisattva*. The reading of the reliefs had been thus conceived that by *pradakṣiṇā* – clockwise circumambulation, the relief either in the main walls or balustrade can be seen at once.

As commonly found in Javanese temples, the walls are decorated with reliefs, which looks not only beautiful but contains religious messages. This kind of art continues in Bali, where many temples are decorated with panels depicting stories from texts, e.g., the *Rāmāyaṇa*, *Arjuna Vivaha*, *Tantri*, etc. Rahardjo states that based on its purposes, the relief can be divided into two categories, namely the story relief and the non-story relief. For the first is supposed to impart a message in a narrative way, while the second is meant to impart symbolic message. Usually in practice both types are used; and sometimes the meaning of a particular point is easily understood when they are read from both sides [16, p. 262]. Hence, they are complementary in nature. Reliefs depicted on the various walls either on gallery or balustrade form series of stories, depicting ethical or philosophical principles of Buddhism. Some texts are referred to, like the *Lalitavistara*, the life story of the Buddha. Due to times and nature, some of the reliefs are in a very poor condition, broken or even lost, so that their messages are very difficult to understand. They were neglected and covered by forest for centuries. It can be imagined that hard work of the workers during the project of reconstruction by the government of Indonesia and UNESCO between 1973-1983 found, identified, selected, and put not only the correct parts to form the whole part of a panel but also the Buddha statues, stupas, etc. It required knowledge, experience, and patience. When the reliefs are observed in detail, there are some parts in panels that may be lost, and the substitutes are just pieces of stone put to match or to hold the structures of the panels. It is perhaps due to nature and long

course of time in Javanese history that some parts of the panels were lost or their condition is getting poorer. The reliefs that face outward should be read from right to left by the pilgrims, whereas the reliefs on the balustrade which face inward should be read from left to right. One should go around the corridor in what is called *pradakṣiṇā*, that is, walking around in the temple in a clockwise direction; thus, the building and stupa as well as the walls are on our right side of the pilgrim. A beginner needs some guidance how to read, so that the visit is effective and fruitful.

Natural elements come to notice as soon as one looks at the panels. There has been a natural taste of the artist to depict in stone. It depicts the fauna and flora condition at the time the temple was built. Gupta mentions that generally, a chain of floral motifs runs around the rectangular panels to provide a frame to a particular scene. Sometimes, as demanded by the story, the whole panel has been divided into two or three parts by introducing one or two heavy pilasters surrounded by a capital. The compositions are not crowded with figures as we find in the Indian reliefs of Amarawati and Nagajurnakonda, but the figures have a feeling of comfort whether standing or seated [1, p. 399]. Each part depicts a unit of action or story in which elements of nature are present. In other words, elements of nature are not taken as the main theme of the panel, but rather support ones providing a background atmosphere taken from the text or additional natural elements to make up the panel.

In comparison with those of Sanchi, Gupta on commenting on animal figures states that at Borobudur, the animals are not displayed in their natural appearance; they look static and lifeless. They have been portrayed stylistically as if they are made out of wood. The depiction of a horse with a disproportionate body in the departure scene appears lifeless [1, p. 400]. This is perhaps due to the fact that the main figure is supposed to be dominant rather than the supporting figures, like animals or tree or plants, following the textual sources. When figures are crafted in a rather abstract form, the imagination is invoked to enjoy the beauty of art. There is room for imagination when figures like horses are not crafted as realistically as expected. The Borobudur artist seems to emphasise the main figure, following the story as mentioned in text. In working out the story, a master mind who is qualified in narrating the story should had been with the artists/crafter.

3.2 Reading from *Mahākarmavibhanga*

More than 160 panels, each measuring about two meters wide and 67 centimetres high, are found in this part. These reliefs are based on the Sanskrit text known as *mahākarmavibhanga* (great classification of actions), which explains the importance of the law of cause and effect (law of karma). As Miksic mentions that the location is just above the ground and serves as the moral lesson to pilgrims, depicting men and women performing both good and evil deeds and being rewarded and punished in hell or heaven for their actions [15, p. 65]. It reminds visitors that goodness is the ground of life, and Borobudur does it for its establishment. It also reminds all that the action (*karma*) is life and to reach the

goal of life through action. In this regards Chandra states that the hidden base is the substratum, as *karma* is the foundation of all spiritual attainments: (a) the common level offers to the householder the hope of a better future life in heaven due to good *karma*, in place of *nirvana* offered to the monastic order. The ritual of worshipping gods was replaced by moral ethics; (b) the second level are the steps leading to bodhi [3, p. 158]. The panels follow a format, that is, they first depict and action, then follow rewards or punishments, testifying that the law of cause and effect is a fundamental principle in Buddhism. In addition to describing heaven, there are eight hot hells that should be avoided and described in details, which has a bold moral message for all.

The *mahākarmavibhanga* scene on Borobudur's hidden foot, on the right depicting the sinful act of killing and cooking turtles and fishes, on the left depicting that those who make a living by killing animals will be tortured in hell and will be cooked alive, being cut, or being thrown into a burning house; a panorama of the endless cycle of birth and death (*samsara*). [15, pp-65-66] This very base is supposed as the first point a pilgrim should perform in spiritual journey. It conveys a moral lesson as the foundation for reaching the highest goal of life.

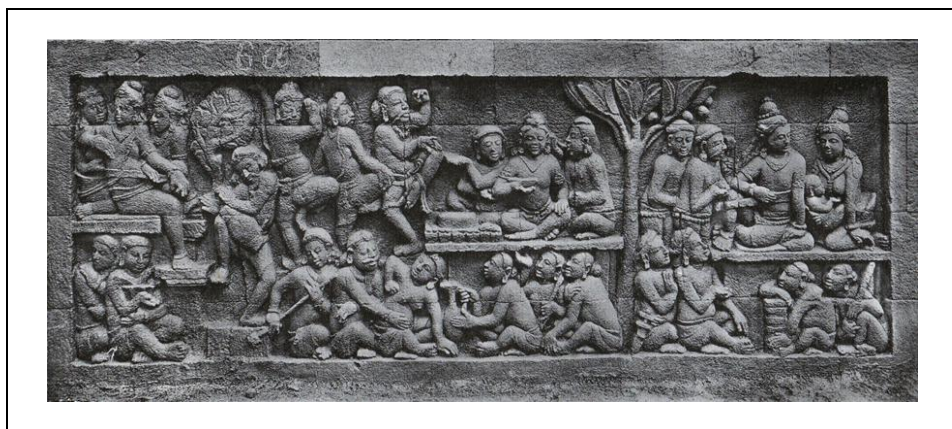


Figure 1. A number of people treating a man who is ill. They look after him by massaging and applying an ointment and medicine (which are taken from nature). The left side may depict the rewards for such behaviour, even though it is not clear [15, p. 66]. In the scene can be seen trees and that (perhaps *tañjung* tree) in the middle part giving the sign to divide the space into left and right sides, which depict actions governed by the law of cause and effect (*karma* law). In treating the ill person who is sitting on a bed, a woman, perhaps the healer showed a flower used for curing the illness. Some people shown pay attention to or look after the ill person as an ethical action commonly performed in this country. Two jugs that perhaps contain medicine are shown. This relief at least shows that nature is a source of medicine for healing.

There was an interaction between human and nature. Source: Balai Konservasi Borobudur.

As Soekmono mentions, the reliefs can be divided into two types, viz. narrative and decorative. The 1,460 narrative panels are arranged in eleven rows that go all around the monument for a total length of over 3000 m. The 1,212

decorative panels, although arranged in rows, are treated as individual reliefs. The first series of 160 narrative panels are on the hidden foot and consequently are not visible. Fortunately, a complete set of photographs was made not long after they were rediscovered, and they can be identified as depicting the operation of the law of *karma* according to the *mahākarmavibhangga* text. [17, p. 20].

The readings of some of the reliefs connected with environmental ethics are presented in Figures 1. – 21.

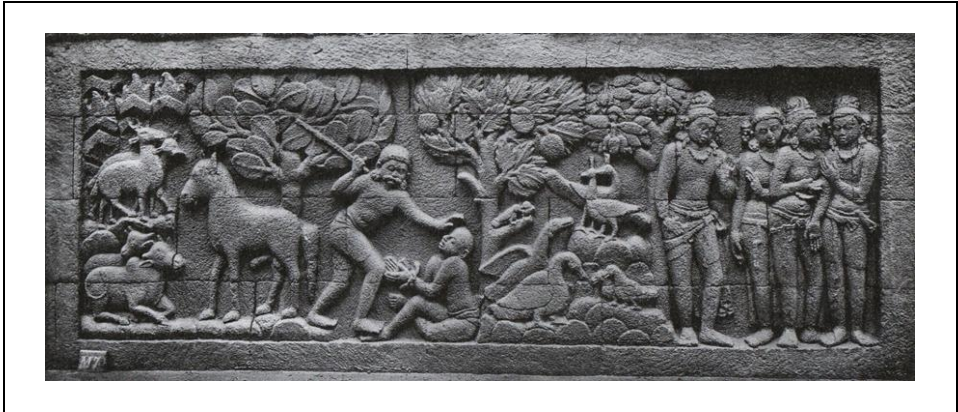


Figure 2. A dove, a peacock, a parakeet, a horse, a buffalo, and a musk deer are reincarnations of people who sinned give a strong message to avoid sinful action in life. Due to serious sin, one can take a rebirth in a lower level of life. These show cause and effect law of *karma*. The scene also shows trees. Source: Balai Konservasi Borobudur.

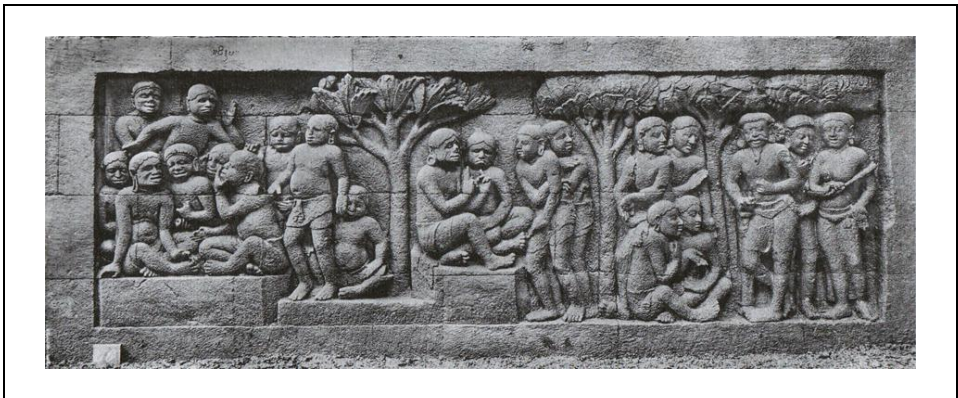


Figure 3. The operation of the law of cause and effect. Bad action will result in misfortune or suffering; in this case an ugly face (shown on the left side). They are depicted in nature under trees. Source: Balai Konservasi Borobudur.

3.3 Reading from *Jātaka* and *Avadāna*

Jātakas are stories about the Buddha before he was born as Prince Siddhārtha. *Avadānas* are similar to *jātakas*, but the main figure is not the Bodhisattva himself, and the saintly deeds are attributed to other legendary

persons. *Jātakas* and *avadānas* are treated in one and the same series without any evident distinction in the reliefs of Borobudur temple. No particular system of alternation is evident. The lower row of reliefs on the wall of the first gallery, for instance, mostly depict *avadānas*. Some *jātakas* are included by way of variation. The system in its upper row of the series on the balustrade is quite different. The reliefs are practically all *jātakas*, with just a few *avadānas* [17]. It also shows the operation of cause-and-effect law.

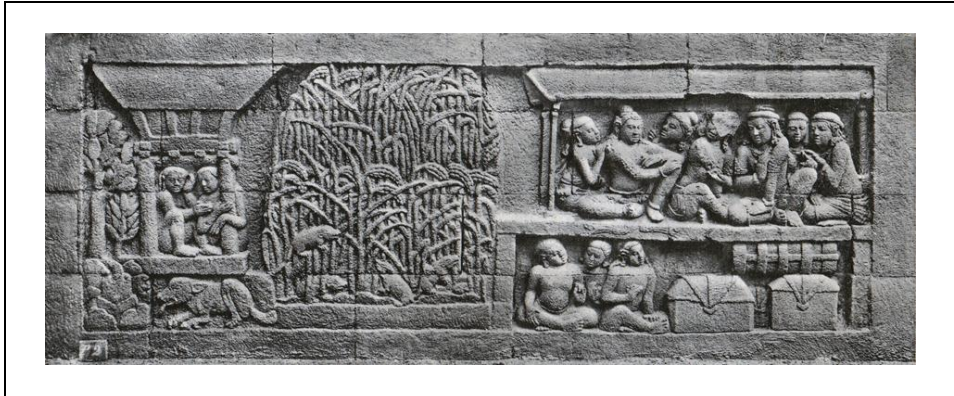


Figure 4. Rejoice to see the victim of famine (cause) rebirth as a person having few possession (effect). The relief also shows paddy, trees, mice, and dog. Source: Balai Konservasi Borobudur.

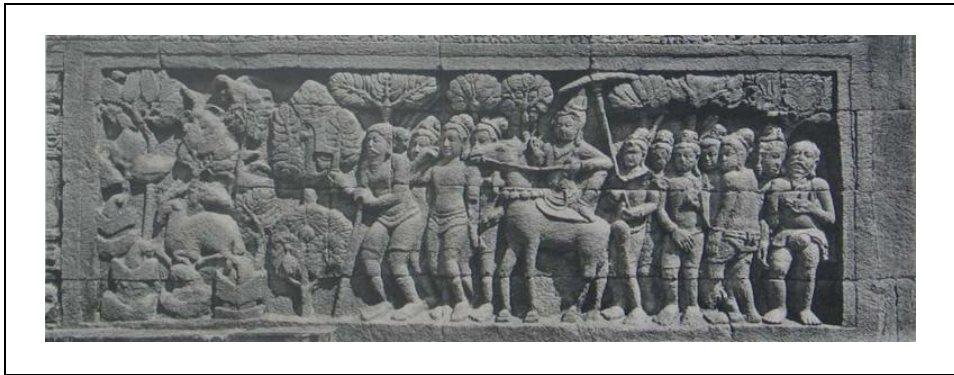


Figure 5: The story about a man named Sudhana who sat down beside a lotus pond. Manohara and her sisters were bathing seen by him. Previously, Sudhana has learned a spell from a wise man to cripple Manohara. The artist who made the relief has successfully shown Manohara's inability to move by isolating in a plain background, while the fairies flew toward the sky and left. One of the fairies saw Manohara in surprise because she did not fly with them. The scene shows various trees, umbrella, animals like horse, and deer. Source: Balai Konservasi Borobudur.



Figure 6. The capture of the *kinnara* Manohara. The *kinnaras* flee from the pond where they have been bathing, but Manohara, who is frozen by magic, is left behind. They are shown flying above the lotus pond [15, p. 71]. Some elements of nature can be seen here, like various trees, lotus leaves and flowers, birds, plants along with fruits, the sky, open air, etc. Source: Balai Konservasi Borobudur.



Figure 7. *Kinnara-kinnari*, a bird couple which symbolizes eternal love. The panel also show different kinds of bird and tree. Source: Balai Konservasi Borobudur



Figure 8. The story of the virtuous king Sibi, who offers his own flesh to save a dove from being eaten by a falcon, both of whom are gods in disguise. Scales are shown weighing the dove and the king's flesh [15, p. 78]. In addition to these elements, also trees, parasol, and open space are shown. Source: Balai Konservasi Borobudur



Figure 9. The Manohara story; rejoicing in the *kinnara* court as Sudhana and the nymph are reunited. The relief shows a dance with musicians seated to the left. In addition to these elements, an elephant, horses, trees, a whisk, and an umbrella are shown. Source: Source: Balai Konservasi Borobudur.



Figure 10. Some more panels show richness in natural elements, like trees, animals like an elephant, a dog, deer, birds, environments, a ship, etc. Source: Balai Konservasi Borobudur



Figure 11. A scene of woman, deer, birds, trees, water (sea). Source: Bali Konservasi Borobudur



Figure 12. A scene of trees, ship, people, and sea. Source: Balai Konservasi Borobudur



Figure 13. The Bodhisattva in Tushita heaven before his birth as Siddhartha Gautama. Some musicians along with music instruments like sitar, drum, etc. are shown. Source: Balai Konservasi Borobudur

3.4 Reading from the *Lalitavistara*

The Borobudur depicts the Buddha's life as narrated in the *Lalitavistara*. As Gupta mentioned, because the Borobudur is a monument of Mahāyāna Buddhism, here the account of the Buddha's life is illustrated according to the *Lalitavistara* as the most elaborate drama in the history of Buddhist art. Nowhere in the world is the life story of the Buddha illustrated on such a vast scale [1, p. 387]. The *Lalitavistara Sūtra* is a Sanskrit *Mahāyāna Buddhist Sūtra* that tells the story of Gautama Buddha from the time of his descent from Tushita until his first sermon in the Deer Park near Varanasi. The term *Lalitavistara* has been translated 'The Play in Full' or 'Extensive Play', referring to the Mahayana view that the Buddha's last incarnation was a 'display' or 'performance' given for the benefit of the beings in this world. The relief showing the birth of the Buddha as Prince Siddhartha, son of King Suddhodana and Queen Maya of Kapilavastu (in present-day Nepal), is near the southern staircase. It is preceded by 27 panels, depicting the various preparations, in heaven as well as on earth, to welcome the final incarnation of the Bodhisattva (the would-be Buddha).

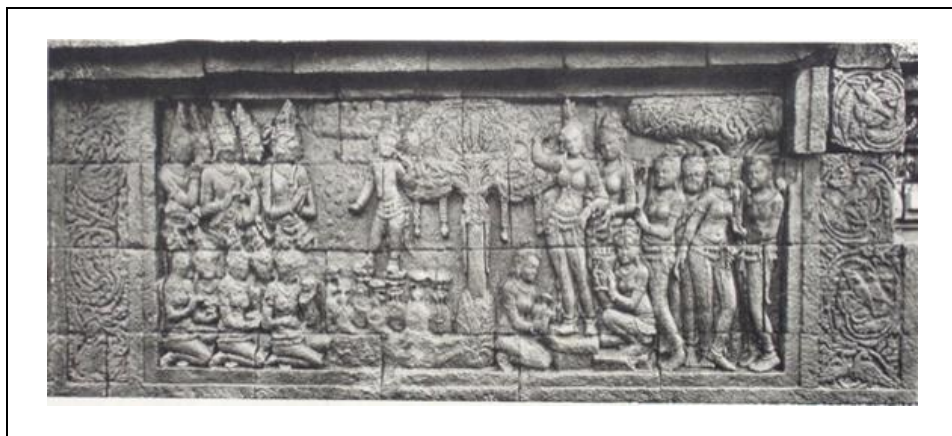


Figure 14. Queen Maya stood in the beautiful Lumbini garden and held the branches of a white banyan tree or *plaksa* when she felt she was ready to give birth. The servant (*dayang*) washed the queen's feet with holy water that came out of the jug. Sakra and Brahma Sahampati knelt down awaiting to the birth of the Bodhisattva. The other gods stood on the left. Bodhisattvas were born from the right side of Queen Maya without going through the genital tract. The Bodhisattva Pavilion dwelling in the womb is taken by the gods to be used as chedi. The relief panels show Bodhisattvas who can walk directly on lotus leaves after birth. The gods and ladies in waiting honor the birth of this great figure. Source: Balai Konservasi Borobudur.



Figure 15. Queen Maya died seven days after the birth of the Bodhisattva. The bodhisattva, who is now named Siddhārtha Gautama, the son of King Suddhodana, was then raised by Queen Maya's younger sister, Maha Prajapati Gautami. Gautami, who was also a queen, looked after Siddhartha as if he were his own son. The relief depicts King Suddhodana in the palace holding Siddhartha. Some trees look like coconut or palm are shown. Source: Balai Konservasi Borobudur.

Before leaving the Tushita heaven the Bodhisattva entrusted his crown to his successor, the future Buddha Maitreya. He then descended on earth, and in the shape of a white elephant with six tusks he penetrated the right side of Queen Maya's womb. To the queen this event appeared in a dream, which was later interpreted as meaning that a son would be born to her who would grow up to

become either a sovereign or a Buddha. [17, p. 21]. Buddha's life as narrated in the *Lalitavistara* and on the Borobudur may be divided into four parts – preparation for incarnation, birth and early life, departure, *sambodhi* and first sermon [1].

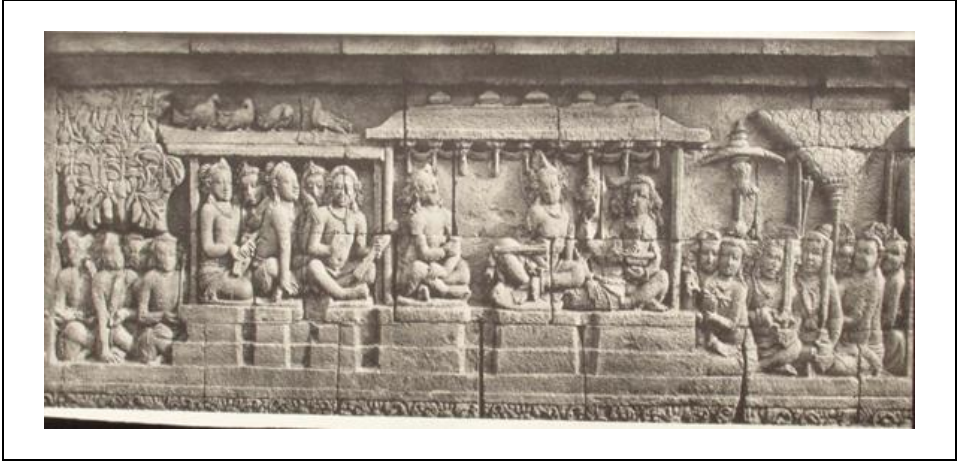


Figure 16. When his first lesson arrived at school, Siddhartha took the opportunity to learn characters to explain the *dharm*a so that the other students could benefit. The reason for Siddhartha attending school was to expose *dharm*a to humans. The long ribbon held by the students is a book made of palm leaves. On the roof of the school were four doves perched listening to Siddhartha's teachings. The figure of Siddhartha in the relief panel is depicted as having a divine circle on the back of his head (*sirascakra*). Source: Balai Konservasi Borobudur.



Figure 17. Siddhārta Gautama then looked for his own way to find liberation, he called himself Sākyamuni (the holy man of the Sakyans). He and his five disciples meditated in caves of Rocky Mountains near Gaya to learn more about trying to free themselves from all desires. In the panel shown various trees and birds. Source: Balai Konservasi Borobudur.



Figure 18. Sākyamuni then took the dirty cloth wrapping the body to replace the robe he had worn for 6 years. He washed it in the pool, when he was about to get out of the pool, the evil god Mara raised the bank so that it was difficult for Sakyamuni to get out of the pool. The goddess who guarded the pond helped by sticking the trunks of the Kakhuba tree towards the pond, so that Sākyamuni could grab onto the branches to help her out of the pool. In the panel also shown various trees, birds, and parasol.
Source: Balai Konservasi Borobudur.

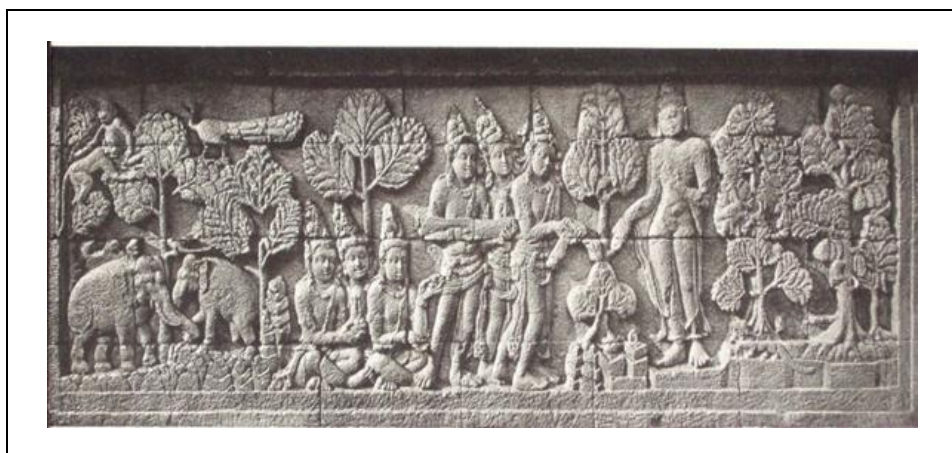


Figure 19. After that event, Lord Wimalaprabha appeared with his companion and presented the yellow cloth because it had been dyed with turmeric. The cloth was more suitable for Sakyamuni to wear. The animals are depicted happily joking in the forest, elephants, peacocks, squirrels, and monkeys. It is also shown various trees.
Source: Balai Konservasi Borobudur.

3.5 Nature and Symbols

Observation limited to the relief of *mahākarmavibhanga*, as observed by Suamba [4, pp. 29-30], it shows the biodiversity of the animal, plant worlds, and human beings that are crafted by Javanese artists. They persistently worked and expressed their artistic talents based on texts of Buddhist teachings. There is no information about the number of artists who worked to finish the panels.

Types of plants and the context of their depiction in the story reliefs *Karmavibhanga* and the *Lalitavistara* of Borobudur Temple (adapted from Setyawan, 2018) [11].



Figure 20. The gods under a number of holy Kalpataru trees (in the history there are 80,000 trees) are preparing the ritual of offering and worshiping, seen incense smoke emitting under the trees. Kalpataru only grows in the world of gods, one of which will transform into a Boddhi tree which is the place for Sakyamuni's meditation in Bodh Gaya. Source: Balai Konservasi Borobudur.

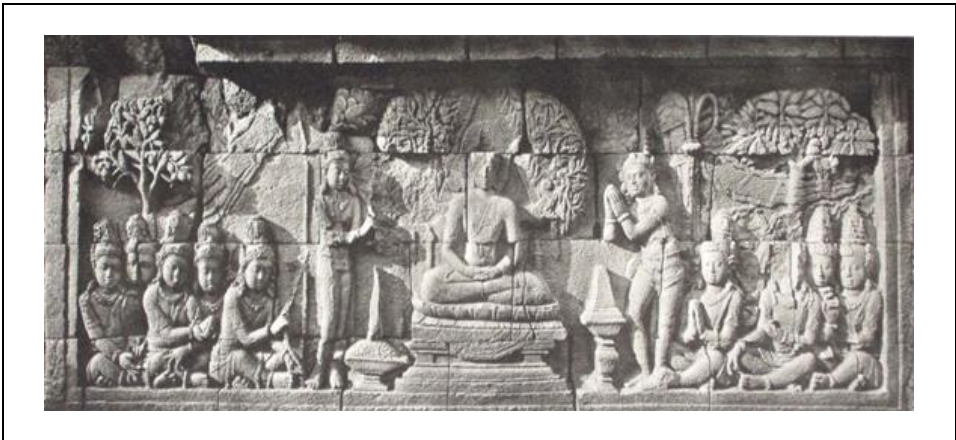


Figure 21. Sākyamuni began meditating under the Boddhi tree in Bodh Gaya, contemplating his life in the concept of *Lalitawyuha*, being witnessed and respected by the gods. Sākyamuni is depicted in the middle of the panel sitting cross-legged on a mat covered with *padmāsana*, on the back of the body there is a triangular *sirascakra* and *prabhamaṇḍala* in the shade of the Bodhi tree. Source: Balai Konservasi Borobudur.

In addition to the lists above, some plants like coconut, the *kalpataru*, rain tree, pines, shrub, sugar cane, and fauna, also available in the reliefs.

On a thousand reliefs, forests, trees or plants, and palaces are the dominant elements which appear in almost all reliefs; however, they are not the main theme of a panel. There are various plants which depict the flora and fauna heritages of this island, like mango, banana, *bodhi*, bamboo, etc. Human beings are depicted in various kinds, as prince, sage, hermitage, hunter, dancer, commoner, man, warrior, woman, ugly man, baby, king, etc. In addition to the trees, the artists also crafted various shelters or houses including pavilions, beds, and huts. Food or drink utensils are often shown. Interestingly, the artists were able to depict the interactions amongst those elements in an artistic way. Very often dialogues took place in shelters or in open spaces. The artists were also very gifted in crafting various kinds of animals found in this island, like elephants, horses, cows, donkeys, dogs, rabbits, snakes, various birds, cocks, hens, insects, etc. The trees seem to be those that were available in Java at that time, like mango, coconut, *bodhi*, banana, bamboo, various kinds of grass, etc. [4, p. 30]. Gupta (p. 43) describes all this in detail: a coronation scene depicts the royal umbrella, the jewellery bearers (neckless, earrings, bracelets), the Brahmana sprinkles of holy water with their bowl and brushes, the palanquin and elephants of state, and horse-mounted attendants and horse-drawn carriages. Palace and temple scenes are richly decorated, including eating and drinking sequences, reception halls furnished with costly couches, thrones, and armchairs, down to simple stools and benches. Other scenes picture storage boxes and chests, dishes, bowls and utensil, lamps, vases and incense burners. Games and dancing girls, accompanied by instrumental music, enliven the scenes of homage-paying and religious observances. Nursemaids wear distinctive dress and ornaments. Many trades and occupations are represented, such as bridge builders working with bamboo, pottery makers, farmers, merchants, vendors with wooden carrying yokes, hunters and fishermen, scholars, and artists. Transportation facilities include four-wheel carts, five types of outrigger ships and dugout canoes. Trees with stylized forms are used to fill the background [1, p. 43]. It really represents not only biodiversity but also pluralistic life, having the teachings of the Buddha as its central theme.

In addition to this, the artists had the talent to depict the philosophical imports of the panels. In this juncture, it can be argued that the artists' job was to manifest philosophical ideas in an aesthetical way in stone, whereas the master mind of ideas to be churned out was a learned person who understood in deep the story and teaching of the Buddha.

Miksic [15, pp. 56-57] has attempted to describe the motifs and meanings of a particular element of the reliefs, like *aksamālā* (rosaries), conch shells, fly whisk, the head of *kāla*, lion, lotuses, *nāga*, *makara*, parasol, stone, and *maṇḍala*.

These are meant to depict some philosophical principles of Buddhism. To understand them some knowledge of Indian culture is required, since the message may be the same but the forms can be slightly different with reference to Javanese nature and culture. These symbols and meanings are shared by both Hindu and Buddhist temples both in Central and East Java. Reliefs describing a particular story or principles are quite commonly found in Javanese temples, like in Candi Jago in East Java, Prambanan in Central Java, etc.

3.6 Interconnectedness: The Importance of Ethics

When we observe those reliefs, we see that nature in its various forms and functions is depicted in almost all panels. There are no panels without the appearance of nature. It shows simple life but conveys greatness in art and culture. This can be understood that the Buddha lived in nature before and after he reached perfection, as mentioned previously. When one wants to portray the life of the Buddha either before or after his birth, everything is close to nature; nature in its various forms and meaning are part and parcel of the Buddha's life. The complex life depicted in various reliefs in the Borobudur temple can be viewed from the Buddhist's view of the relationship of human and nature in which the mind plays an important role. Right thoughts (*samma-sankappa*) are the starting point to deal with the environment. Environmental problems arise due to wrong thoughts. The relation amongst elements is very complex and multi-dimensional. [4, p. 31]. To see these relationships will help to understand the importance of ethics in maintaining the environment. Depiction of biodiversity of nature can be taken as the attitude prevalence of Old Javanese society in looking at nature.

Suamba further states that all elements of nature have their own meanings, roles, and functions to perform, even though they are flows of consciousness. This universe can function as it is due to each of its components performing its own function and having mutual relationships with other components, either being or not being, or nature or non-nature. It is complex and multi layers components of universe ranging from small unit to the highest one. Of this view, each serves the other mutually for their existence. A plant can grow, develop and give us leaves, flowers, wood, etc. due to other entities like soil, water, sunlight, wind, etc. which all provide a conducive environment for growing. When humans live in nature, they take natural resources like water from nature for living [17, p. 60]. The existence and role of the mind is supposed to cope with the imbalance issues of human and environment. Therefore, ethical values are required to think, speak, and act rightly towards the environment consisting of physical and non-physical entities.

Nothing exists without any interdependence with anything else in an impermanent way. Buddhism teaches the doctrine of dependent origination, which is based on the law of cause and effect (*pratītya samutpāda*). The Buddha explains in the *mahātanhasankaya Sutta* that the *samsaric* life (the cycles of birth and death) arises due to ignorance. Life is formed by many causes and conditions. The same ignorance leads beings to pollute the environment and consume excessively. Craving is the second major cause for the pollution of the environment. The manufacturers of this century encourage the consumers by creating unnecessary wants [17]. The law of dependent origination presupposes the interconnectedness of all things, since they are basically cause and effect in multifarious forms. In other words, nothing remains in isolation from other things in existence. The function or meaning of an existing thing can be understood when it exists in connection with the other, like planting paddy in a rice field: this depends on so many elements, like climate, water, soil, fertilizer, farmers, sun rays, etc. for a good harvest. The existence of an entity gives rise to the existence of other entities

infinitely. The relation is mutual in which each serves the other. This view is the base on which spiritual cultural ecology may be defined from a Buddhist perspective. Maintaining interconnectedness means that one acknowledges and respects the existence of other entities, not only human beings, but all entities in the world. The reliefs of *mahākarmavibangga* show the Law of Cause and Effect in operation, and it is successfully presented through various scenes in the reliefs. [4, p. 31].

The use of environmental resources should not deplete them, and for this reason environmental ethics is badly required; an ethics inspired by the teachings of *śīla*, *samādhi*, and *panna*. It is about management between exploitation and conservation of nature. It is important to control human desires, because these are never satisfied. On the one hand, this ethics connect human to nature, on the other hand, it prevents wrong doing to nature. This is a guiding principle to govern the management system applied, which covers right action (*samma-kammanta*), right livelihood (*sama-ajiva*), and right effort (*samma-vayama*). Buddhism uses the term 'Dhamma' or 'Dhammata' for the Order of Nature or Law of Nature. As per the basic precepts of Buddhism, everything in the natural world is subjected to change (*anicca*). If men are aware of this fact, the natural environment will be well preserved. He may take benefit from nature; it is not depleted but is sustained for a balanced ecosystem. E.F. Schumacher in one of his works, quoting M.K. Gandhi, says that the earth provides enough to satisfy every man's needs, but not for every man's greed. This attitude is nothing but part of *samma-jiva* (right livelihood). [4, pp. 11-2]. able living together as a basic philosophy in education does not only refer to human beings but to nature with its complexities.

The Buddhist values emphasize simplicity instead of complexity, moderation instead of over-indulgence, generosity instead of greed, loving-kindness instead of hatred, and peace instead of war. In *Karaniyametta Sutta*, it is stated in Pali that a person who wishes to attain that state of calm (*nibbana*) must be gentle (*mudu*). We must be gentle towards the environment and the things we use. Contentness (*santussako*) and enoughness (*santrindiyō*) are needed to control the senses (eyes, ears, nose, tongue, touch, and mind); because people try to satisfy these senses excessively, they fall into the consumption trap [7, p. 9]. When uncontrolled mind drives a man, he may take from nature uncontrolled also, satisfying his greed.

Buddhism looks at cultural ecology not merely from the point of view of physical phenomena but also from that of spiritual ones. There is an inner and an external world which should be given equal importance. Exploiting nature excessively means forgetting the inner world. Therefore, the important role of the mind is to balance the extremes in sensual enjoyments. Thus, it is not sufficient to define it with reference only to nature and its relation to man only, but the interrelatedness of nature and man should be viewed as a medium or path through which one can be spiritually lifted up to higher sphere of life. [4, p. 32]. When the enjoyment of nature is performed without controlled mind, the result is far from happiness rather than sufferings (*dukkha*).

4. Conclusion

The Borobudur Buddhist temple of Java is full of symbols and meanings, both in the reliefs and in the whole structure of the monument. No one can understand it without sufficient knowledge in Buddhism. A reading from the reliefs shows that it needs some philosophical and ethical background to understand them. A spiritual seeker will see that the Borobudur temple is a philosophy in stone. In other words, a temple of ideas coming first before building a physical monument. It is no doubt a model of spiritual cultural ecology *par excellence*, as none of its elements is free from the message of the Buddha and Buddhism about not only interaction between human and environment, but also between humans and gods. This attitude regards the external world as an object of enjoyment; people will take more and more from nature without giving protection in order to sustain it. Besides showing the relation of men and nature, this monument guides one on a spiritual journey as depicted in ten steps from bottom to top (i.e. *dhramamégha*).

A close look at the reliefs shows that there are many elements of nature depicted by the craftsmen; they are interrelated with other aspects of the reliefs. Things like various trees and plants, forests, ponds, gardens, rivers, the sea, the sky, various birds, instruments, houses, shelter, palace, mountain, fish, water, instruments, etc. are shown in the panels artistically. It shows that Borobudur temple is rich in philosophical ideas and art in consonance with the Buddhist teaching that preserved nature. It is at the same time showing that mankind and nature are inseparable, and that the imbalance of one element will affect the whole. This is in consonance with the law of dependent origination (*pratītya samutpāda*) that nothing in this world is isolated, instead each thing is connected physically or spiritually with the others. The existence of one entity is due to the existence of the others.

One is taught that mankind and nature are inseparable and part and parcel of life. For happiness, one should maintain harmony and peace with nature before thinking about peace for human fellows, for imbalance between mankind and nature can cause environmental problems, which ultimately affect the whole system of the universe. Maintaining relatedness amongst these elements are messages for keeping mankind and nature in balance. In such a situation, one needs environmental ethics as a guidance to deal with the environment in the spirit of the Buddhist teachings.

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