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SOCIAL ACCOUNTING AND ANCIENT JAVANESE SOCIETY: THE CASE OF BOROBUDUR TEMPLE

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Abstract: The objective of this paper is to provide evidences of concerns about social accounting issues in ancient Javanese society in the case of Borobudur temple reliefs. This paper uses qualitative and interpretative approach as method. The data were collected through library research and observation in Borobudur temple. The result proves that social accounting in ancient Java was interpreted, as the manifestation of human's spiritual journey to liberate himself from worldly desire in the quest for supreme enlightenment. The determination of *sima* and narrative reliefs about punishment for someone who captures and consumes natural resources excessively, provides evidences of good moral values contained in accounting and their implementation in business life. Based on the Buddhist philosophy, social accounting eventually came as an economic control and mediator for conflicts between human beings, their needs, and their environment in a holistic manner.

Keywords: Social Accounting, History, Borobudur, Karmavibhangga





CONTABILIDAD SOCIAL Y ANTIGUA SOCIEDAD JAVANA: EL CASO DEL TEMPLO DE BOROBUDUR

Resumen: El objetivo de este documento es proporcionar evidencias de preocupaciones sobre problemas de contabilidad social en la antigua Java en el caso de los relieves del templo de Borobudur. Este documento utiliza un enfoque cualitativo e interpretativo como método. Los datos fueron recolectados a través de la investigación y observación de la biblioteca en el templo de Borobudur. El resultado demuestra que la contabilidad social en la antigua Java fue interpretada como la manifestación del viaje espiritual del ser humano para liberarse del deseo mundano en la búsqueda de la iluminación suprema. La determinación de los relieves narrativos y sima sobre el castigo para alguien que captura y consume recursos naturales en exceso, proporciona evidencias de buenos valores morales contenidos en la contabilidad y su implementación en la vida empresarial. Basado en la filosofía budista, la contabilidad social eventualmente se convirtió en un control económico y mediador de los conflictos entre los seres humanos, sus necesidades y su entorno de manera holística.

Palabras clave: Contabilidad Social, Historia, Borobudur, Karmavibhangga

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Introduction

Borobudur is one of the most important manifestations of Indonesian cultural heritage. This remarkable monument is a symbol of the greatness of Indonesia's past. It was constructed around 800 A.D., when Central Java was ruled by *Samaratungga* of *Sailendra* dynasty, who adhered to Mahayana Buddhism (Soediman, 1973). The period of 750-850 was the golden age of the dynasty. It produced a great number of monuments all over the plains and mountain slopes of Central Java. The name *Sailendra* appeared for the first time in a stone inscription found in Sojomerto, the north-western coastal area of Central Java. As it is a personal name, the obvious assumption is that the later rulers of the *Sailendra* dynasty were his descendants (Soekmono, 1976).

Borobudur's 1,460 narrative reliefs, including 160 *karmavibhangga* panels found on the hidden foot, extend over a linear distance of about 3 kilometers. The *karmavibhangga* reliefs represent *Mâhakarmavibhangga*¹ scripture. The scenes in the reliefs emphasize daily life, morality on earth, actions which result in good and evil, together with all their consequences, both in heaven and in hell. This is the ground rules of *karma*, which constitute the essence of Buddhist view of life, death, and rebirth (Soekmono, 1976; Fontein, 2010). Interestingly, twenty-three of the panels can



¹ Mâhakarmavibhangga is a holy Buddhist script which describes the operation of karma, i.e. the law of suffering's cause and the result of actions, in reincarnation, in heaven and in hell (Soekmono, 1976). The teachings of Mâhakarmavibhangga emphasize the causal relationship between samsara and karma which is determinant in shaping humans life at present and in the future as well as consequences of all deeds during their life (Santiko, 2012). The law of karma applied to all people whether they were the King, noblemen, priest or society in general (Haryono, 2010). Karma itself is determined by dharma, that is noble deeds in devoting oneself to religion and to loving one's fellow creatures (Satrio, 1989).

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be recognized as quotations from *Mâhakarmavibhangga*. The other scences reflect the daily life of ancient Java in the ninth centuries. Many aspects of the ancient Java's way of life are revealed, including the details of religious activities, economy, traditional trading, technology, and material culture (Haryono, 2010).

Several authors have explored the economic systems of ancient Javanese, including market and trade (Christie, 1992,1998; Rahardjo, 2011; Haryono, 2010, 2013), tax (Dwijanto *et al.*, 1992), and *sima*² (Haryono, 1999). The evidences show that the economic activity of ancient *Mataram*³ is divided into three types: production, distribution, and consumption, where the distributions of goods and services were held in markets (Rahardjo, 2011). The ordinary market in this period was called *pkan*. The market and trading were carried out in accordance with the concept of village settlements (*panatur desa*), that is the rural pattern of one main village surrounded by four villages in the four cardinal points (Christie, 1992). All commercial activities, including production, consumption, work, and distribution must contribute to well-being and help realize the potential for a good and noble life (Payutto, 1994).

These evidences testify the fact that more than one thousand years ago Indonesian civilization had already masterd an advanced level of economic systems, including business trading and accounting. According to Belkaoui (1983), accounting is indeed designed to achieve certain social goals within a country's zones. The zones of accounting practice are influenced by the environmental factors, such as social, economic, political, and culture, where accounting is carried out. The environmental factors make accounting concept and practices differ significantly across countries. Then, the accounting objectives, standards, policies, and techniques used in various countries also differ. It means that the evolution and the development of accounting are highly dependent on the environment (Costouros, 1977).

Previous studies prove that accounting is shaped by religious values (Choudhury, 1982; Nigam, 1986; Mattessich, 1989, 1998; Yamey, 1994; Carmona & Ezzamel, 2007; Solas & Ayhan, 2007; Liyanarachchi, 2009, 2015; Boyce *et al.*, 2009; Dillard, 2009). A study by Yamey (1994) shows that social accounting concept has evidently been in practice in the Middle Ages in Europe; it includes the earliest known exposition of the moral conduct of merchants. The merchants, as true Christians, were obliged to behave according to Christian values. Furthermore, they were required to obey religious rules reflected in the ten mercantile commandments. They were forbidden to gamble, drink or eat excessively, make contact with wicked and infamous people, practise alchemy, take part in jousting, smuggle, steal, lie, and become extravagant. The ten mercantile commandments were used as a moral guide to conduct in business that presented frequent opportunities of violating divine law.

The study of Liyanarachchi (2009) shows that accounting is relied upon to maintain the reputation of Buddhist monastery, its members, rulers and people. The study of Carmona &



² Sima means land granted free-taxes status or other obligations to authority. In a sima, a limited number of busines were exempted from taxes. Yield or service from sima could be applied to a religious end (Dwijanto et al., 1992; Soekmono, 1995).

³ Ancient *Mataram* was the dominant state on Java by the end of the ninth century, which is established by Sanjaya the founder of the *Sailendra* dynasty. The *Sailendras* are known to have been ardent followers of the Lord Buddha (Soekmono, 1976; Christie, 1992).



Ezzamel (2007) in ancient Mesopotamia and Egyptian societies concludes that accounting has been a powerful mediating institution among individuals, organizations and society. Furthermore, the study of Liyanarachchi (2015) concludes that Buddhist Temple Accounting respond to highly sensitive and complex accountability issues that arose in the administration of Buddhist temples, which had to be addressed with utmost care so as not to create unwanted interference with the affairs of its clerics, who enjoyed a privileged place in the religious, social and political spheres of Sri Lanka. Thus, different societies and people are able to conceptualize accounting methods to suit their purposes.

Based on the result of several studies above, this paper provides evidences of the concerns about social accounting issues in ancient Javanese society. This paper commences with a discussion of some prior studies on the history of Borobudur temple and *karmavhibhangga* reliefs. Following this description, we explore the economy, social and spiritual activities of ancient Javanese based on the evidences depicted in *karmavhibhangga* reliefs. Lastly, we seek to provide an explanation for any interpretation of the social accounting issue in the ancient Javanese. Overall, by tracing the socio-economic matters in Borobudur temple and *karmavhibhangga* reliefs, this article contributes to addressing social accounting issues in a holistic manner. Borobudur, as a monument of humankind, provides guidance in understanding social accounting phenomena. According to Previts *et al.* (1990), historical researches in accounting offer useful insights into present and possible future issues. Moreover, Napier (2001) claimed that accounting has the potential of contributing to social improvement; it seeks to mediate the relationship between people, their needs, and their environment (Chua, 1986).

The Symbolical Meaning of Borobudur Temple

Borobudur temple symbolizes the universe in a cosmic mountain, named *Meru*, a sacred mountain for Buddhists, a chamber in which hermits meditate to attain spiritual power. Javanese inscriptions often refer to temples as mountains (Soekmono, 1976: Miksic, 2010). The summit of the cosmic mountain is the heavenly abode of the Gods, where the palace of *Indra*, the King of the Gods, is located. Above it rise the multiple heavens of the spheres of desire, form, and formlessness. Borobudur is a complex, multifaceted creation, a brilliant artistic blending of architectural vision, Buddhist thought, and cosmological notion. The *stupa* symbolizes the triumph of nirvana, or total extinction, over *samsara*, the endless chain of rebirths (Fontein, 2010).

Being a replica of the universe, Borobudur is divided into three major subdivisions in the Buddhist cosmology: *kamadhatu*, *rupadhatu and arupadhatu*. The foot or base of Borobudur represents the *kamadhatu*, a sphere of desire, i.e. the phenomenal world in which we live. The *kamadhatu* as we see it nowadays represents a modification of its first design. The second sphere, the *rupadhatu*, is a sphere of forms of a higher nature than those of the phenomenal world. It is symbolized by the four square galleries above the base, of which the outer parts are bordered by balustrades. The highest sphere, the *arupadhatu*, is a sphere of formlessness, symbolized by the three circular terraces around the main stupa (Soediman, 1973).

Borobudur temple was used as a monument to glorify the greatness of the reigning royal dynasty and, at the same time, as the centre of Buddhist pilgrimage. The ten mounting terraces of



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the structure then correspond to the ten successive stages the *Bodhisattva*, ⁴ which has to be achieved before attaining to *Buddhahood*; while nine kings of the *Sailendra* dynasty preceded the reigning king who had the monument built. A *Sailendra* king had to do his utmost to pave the way for attaining to *Buddhahood*. He had to accumulate virtue as much as possible during his reign. He also had to glorify his predecessors, and one of the most meritorious ways of doing so was to erect monuments dedicated both to his patron and to his forefathers (Soekmono, 1976). Miksic (2010) stated that there are at least three symbolic meanings which can simultaneously be interpreted from Borobudur Temple, i.e as a mountain symbolizing ten levels to Buddhism, a symbol of the legitimacy of economic and political power in *Sailendra* dynasty, and a *stupa* symbolizing death and rebirth. Alignment between religious and political meaning is an important part of the design concept of this temple. On the one hand Borobudur temple can be seen as part of religious practice to attain *Buddhahood*, but in the other domain this temple is also filled with political behavior as a *mandala* of new power and territory, especially for the *Sailendra* dynasty.

The Karmavibhangga Relief

Borobudur's 1,460 narrative reliefs, including 160 *Mahakarmavibhangga* panels, are located on the lowest part of the temple, which is known as 'the hidden foot' (Haryono, 2010) because *karmavibhangga* relief is currently covered with additional stones in order to prevent the temple from collapsing. Borobudur temple's foundation is in the shape of *punden berundak* (stepped pyramid), and it only rests on *tanah urug* (backfill soil). To anticipate landslides prior to its finishing, the temple's feet were amplified with additional walls covering a number of reliefs that were carved on the original feet of the temple from all directions (Joesoef, 2015).

Karmavibhangga relief depicts Buddha's teachings written Mâhakarmavibhangga scripture. The teachings of karmavhibhangga emphasize the causal relationship between samsara and karma, the determinants of humans' life at present and in the future and the consequences of their deeds during life (Santiko, 2012). The karmavhibhangga is a treatise on the basic principles of causation, the ground rules of karma, which constitute the essence of the Buddhist view of life, death, and rebirth (Fontein, 2010). The Sanskrit word karma means that humans receive consequences what they do. Karma is determined by dhamma, the noble action of devoting oneself to religion as well as caring to fellow living creatures. Buddhism contains the belief that it is man's fate to be reincarnated into the world, before being able to reach perfection. Each life is determined by the preceding one. Therefore, Buddhism considers that it is important for man to make efforts to free themselves from the cycle of reincarnation, which is a kind of suffering (samsara) (Magetsari, 2010).

Karmavibhangga is actually one of the most important parts of Buddhism, concerning with how man should face his life in this world by abiding the Noble Eightfold Path and avoiding certain prohibitions called the Eight Sins. The essence of the prohibitions relate to the teachings that urge man to avoid sins, such as murder, abusing other people, lying, fighting, robbing, evil



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⁴ *Bodhisattva* refers to anyone who has generated *bodhicitta*, a spontaneous wish and compassionate mind to attain *Buddhahood* for the benefit of all sentient beings (Wikipedia, 2019).





thinking and speaking, ignoring religious teachings, insulting monk/priests and other bad deeds (Satrio, 1989). Concurrently, the Noble Eightfold Path encourages every follower to traverse, that is to have an honest/rightful business, rightful vision, good intentions, speak the truth, behave in the right way, make an honest living, have rightfull mindfulness and concentration (Magetsari, 2010).

The scene depicted in the *karmavibhangga* reliefs provides an overview of not only human moral turpitude accompanied by inherent penalties but also human and reward of good deeds. Generally, the reliefs are the depiction of human's life in the never-ending circle of birth-life-death (*samsara*). According to Buddhism, this must be removed to perfection. The details of the scenes were assembled in accordance to the life conditions of the ancient Javanese society around Borobudur temple. From that illustration, various activities of life in the ancient time such as social, economic, and religious activities can be treasured (Santiko, 1989).

Research Method

This research uses qualitative and interpretive approach and was conducted through three stages: data collection, data processing, and interpretation. The data were collected through library research and observation. The library research was done by collecting several photos from the complete photo of *karmavibhangga* reliefs and reading literature and scientific works that discuss *karmavibhangga* relief and the socio-economic life of ancient Javanese society around Borobudur. The observation was done by directly observing Borobudur site to validate the secondary data obtained from the library research. The collected data were then descriptive qualitatively analyzed and interpreted to find the general description of the social accounting contained in the *karmavibhangga* relief.

Economic Activity

The economic activity of ancient Javanese appear in the *karmavibhangga* relief. Most of the scenes in the reliefs display a variety of plants, animals and rice fields, indicating that ancient *Mataram* kingdom had fertile soil that enables its people to work as farmers. Ancient *Mataram* was known as an agricultural Kingdom that relied on abundant agricultural products supported by inter-regional trade activities that played an important role in supporting its economy. Rahardjo (2011) stated that the economic activity of ancient *Mataram* was divided into three: production, distribution, and consumption. The production activity is to fulfill the physical needs sourced from agriculture, farming, animal hunting, planting, and crafting. That particular activity is exhibited in the relief which mostly delineates natural environment such as paddy fields, fields and gardens filled with various plants (see Picture 1&2). The most of harvested agricultural product was paddy as the main food source of the ancient Javanese.





Picture 1
An illustrations of paddy fields area (Panel number 65)



Source: Borobudur Conservation, 2012

Picture 2
An illustration of plantation areas (Panel number 123)



Source: Borobudur Conservation, 2012

The mechanism of distributing goods and services were sold was through markets (see Picture 3), mentioned directly in *Turyan* (929 AD) and *Muncang* (944 AD) inscriptions. The ordinary market in this period was called *pkan*. The word *pkan* referred not only to the market but also to an open space in the village used for all manner of gatherings, market included (Christie, 1992). The main consumption in this period was temple construction and maintenance (see Picture 4). All commercial activities, including production, consumption, work and distribution, must contribute to well-being and help realize the potential for a good and noble life (Payutto, 1994).

Based on the evidences, ancient Javanese economic system was inspired by Buddhism, which has moral values as the basis for regulating the mindset and behavior of every individual, both as human beings and as economic agents. Dillard (2009) stated that the philosophical basis for Buddhist economy is Buddhist-based humanism. The Buddhist economy is grounded in the Four Noble Thruths that recognize the certainty of dissatisfaction (suffering) with the material state of life. Buddhist economy sees humankind's responsibility as minimizing intervention and exploitation, and the use of nonrenewable resource represents violence against nature perpetrated by ignorance.







Market and Trade

The trading system that developed at this period was carried out in accordance with the concept of village settlements (panatur desa), that is the rural pattern of one main village surrounded by four villages in the four cardinal points. As a form of human interaction with the environment, trade can run optimally through markets as supporting facilities. The markets were also related to the five-day week (pancawarna) system; the days are umais, pahing, pwan, wagai, and kaliwuan. By following that market system, all villages included in the settlement grew into the place for trading, at least once in five days. One cycle of the system in Javanese is called sepasar. The five-day system also possesses a highly symbolic meaning related to cosmological beliefs. The system known as mancapat (four) and mancalima (five) correlates each day with one of the four quarters of the worlds: the east belongs to umais, the south belongs to pahing, the west belongs to pwan, the north belongs to wagai, and kaliwuan is associated with the central market (Christie, 1992; Rahardjo, 2011; Haryono, 2013).

Farmers took their goods to the market on the day when it took place in their village. The goods included rice, fresh fruits, vegetables, herbs and medicines, freshwater fish, eggs, cooked snacks, and locally trapped birds and animals. These local householders also carried to market a number of things they refined or manufactured at home during their spare time. They also carried to market a number of things they refined or manufactured at home during their spare time, such as sugar, oil, lime, charcoal, and bamboo, rattan, and reed items such as mats, screens, baskets, sun-hats, and thatching, as well as low quality pottery, and small items carved from wood, such as knife sheaths, and parts of looms (Christie, 1992).

Market in the sense of a place for the exchange of goods and services also developed in places close to the center of religious activity. Such market was usually intended to serve people who make pilgrimage to certain important religious events that took place according to a regular time cycle, as well as to serve the custodians of sacred buildings. For the same reason, markets could also develop near the center of government. In a place like this the market only appeared during the commemoration of certain holidays which could take place both day and night. The center of activity at that time was a large square near the palace, so the market in the sense of a physical building could not be found, because it soon disappeared along with the end of the royal event (Rahardjo, 2011).



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Picture 3
An illustration of a crowded traditional market (Panel number 1)



Source: Borobudur Conservation, 2012

Along with the increase in trading activities and trade centers in several regions, the ancient *Mataram* Kingdom tried to harness and regulate the growing of the wealth of the port region by establishing *sima*. The clauses in *sima* charter mention about deals with permissible level of tax free trade in village that had been granted with *sima* status. They set the number of resident vendors or artisanswho are allowed for free-tax trades and the volume of trade or production that does not incur tax. The entitlements affected not only the *sima* village but also other markets attended by professional traders and artisans. The core of the regulation was identifying the number of shifts in the production and consumption patterns in Java that had a lasting impact on Javanese society (Christie, 1998; Haryono, 1999). It means that business limitation in *sima* villages was applied to stabilize income from trading. The income was redistributed within the society for sacred buildings maintenance (see Picture 4). Furthermore, it had a considerable role in contributing for the kingdom, especially in social, political, and economic life (Dwijanto *et al.*, 1992).

Picture 4 A worship activity at a temple (Panel number 141)



Source: Borobudur Conservation, 2012





Social and Spiritual Activities

Social structures can be identified in *karmavibhangga* relief. In this period, ancient Javanese civilization was characteristics by mechanical solidarity among society members indicated by relationship forms that concern more with values of harmony, a supportive tolerance system, and obedience in tradition. Religion was used as a moral source and the basis for implementing repressive social regulations (Rahardjo, 2011). In traditional societies norms and regulations that coordinate social life are typically rooted in a dominant religious tradition and take motivational force from the authority conveyed by their association with that sacred base (Yamey, 1994).

The social structures were divided into four social stratifications: the King or aristocrats, custodians of holy places or temple, occupation-based class (traders, businessmen, goldsmiths, ironmongers, coppersmiths, earthenware, leather craftsmen, carpenters, weavers, cloth dyers and artists), and commoners (Azul, 1989). The social stratification was standardized by particular ideology as the basis for legitimacy. Three aspects to alienate social hierarchy are leading role, governmental position, and wealth ownership. Based on the leading role of this system, monk/priest was on the highest hierarchy, followed by aristocrats. The next hierarchy consisted of occupation-based class, and the lowest on the hierarchy is commoners. The system emphasizes that monk or priest and aristocrats occupy the highest rank, which gives them special rights that commoners never had (Rahardjo, 2011).

In this period, the king was seen as God's manifestation. The godlike characteristics in King were translated in various systems like protection, service as well as prosperity for his people. Accordingly, as an effort to support a better relationship between the government (king) and the people, the latter were obliged to dispense some amount of money into kingdom's treasury as tax. The tax would be returned to people in the form of infrastructure financing (procurement of irrigation, roads, bridges, schools, worship places, and others), financing people's well-being and the safety, as well as other generic financings related to ruling party's duty in governing its people (Dwijanto *et al.*, 1992).

In the case of social living, sanction systems were implemented to confirm social norms. The sanctions for wrong doings indicated the power owned by particular institutions. Three well-known forms of sanction system were condemnation sourced from religious beliefs, financial or property fines, and physical punishment. The sanctions imposed on wrong doers were pricipally based on religious teachings as affimed in the *karmavibhangga* which emphasized the law of causal relationship in Buddhism. The specific structural scheme of this row of *karmavibhangga* scenes is that each panel consist of two parts the left and the right side, each with a separate scene, however both are interconected. The first one, which is on the left, contains the cause, whereas the second scene on the right contains th eeffect, following the teachings of *karmavibhangga* regarding rewards for good deeds and punishments for bad deeds.





Picture 5
Cathing Fish and The Punishment (Panel number 109)



Source: Borobudur Conservation, 2012

Picture 5 above, displays situation in the forest as a place for the deers to take shelter and also a river with various fresh water fishes with some fishermen were catching the fishes. The left side of the panel presents a picture of two people carrying the fishes they had caught to be sold. Moreover, the scene of the far left illustrates purgatory situation where there are some people being burnt in a giant cauldron by which sides two purgatory guards standing and holding maces to oversee. Miksic (2010) states that the reliefs like Sanskrit text depict the most basic teaching: the rewards of virtue and the punishments of sins. People who kill of animal are punished in hell; they are bird hunters, fish and turtle catchers, sheep flayers, even rate smokers.

This condition remains as a constant reminder to mankind not to mistreat other living creatures, not to forget the lessons and teachings of Buddhist faith. The core of Buddhist teachings is the Four Noble Thruths as follows. 1) Life is suffering. The meaning of life here corresponds to the time from when life begins at birth until the moment of death. Humman suffering does not end with death. Humans will be instantly reborn after their death, and will thus be plunged once again into suffering. This will continue endlessly until humans become able to free themselves from suffering and attain Buddhahood. 2) The cause of all forms of suffering is ignorance, either ignorance to the nature of reality or ignorance which gives rise to the desire of possession and control, which are associated with the adherence to wordly existence. 3) Suffering can be ended. 4) There is a means to bring an end to suffering, namely The Noble Eightfold Path (Magetsari, 2010). The Noble Eightfold Path provides a basic guideline for living and acting in the world, which consists of right view, right intent, right speech, right action, right livelihood, right effort, right mindfulness, and right concentration. Boyce *et al.* described The Noble Eightfold Path in a more explicit manner as follows:

"Right view (right understanding) involves a focal point of integrity as an imperative at the core of human life, thought, and action. Right intent (also right thought or right resolve) implies an attempt to understand the nature of cause and effect and to act in a way that involves non-attachment and absence of craving for sensual or material pleasures. Right intent is free from ill will and harmfulness. Right speech means abstention from lying, from divisive and abusive speech and from idleness in speech. Speech should originate in goodwill, and be mindful of timeliness, truth, care and affection to generate beneficial outcomes. Right action is generally





expressed in terms of abstinence from harmful actions, including violence, killing, stealing, deception and sexual impropriety. It therefore implies the cultivation of non-violence, honesty and propriety. Right livelihood requires the abandonment of dishonest and harmful sources of livelihood, abstention from activities that bring harm to other beings, including trades in arms or weapons, human beings, animals for slaughter and harmful substances such as drugs, other intoxicants and poisons. Right effort involves the application of human endeavours and qualities towards skilful work for developing understanding, the others' benefit, social life and, ultimately, wisdom. Right mindfulness puts aside greed, hatred, delusion and focuses on the self, seeking instead a focus on awareness of and feeling for the true nature of things in themselves, and not as they appear to be. Right concentration involves the domain of meditation and the cultivation of awareness" (Boyce et al., 2009, p.68).

The Social Accounting in Borobudur

Borobudur represents a symbol of universe in which man and nature is blended into a configuration of prosperity, tranquility and harmony, becoming a mandala for mankind to self-liberation from worldly desires. The shape of Borobudur and *karmavibhangga* relief carved on it indicate that spiritual virtues function as the way of life, which is inspired from Buddha's teachings. The teachings affirm that all humans live by avoiding religious prohibitions and implementing the Noble Eightfold Path. The prohibitions include killing, abusing other people, lying, fighting, robbing, evil thinking and speaking, ignoring religious teachings, insulting monk/priests and other bad deeds.

In ancient Java, kingdom's sustainability depended on the availability of agricultural products. Natural resources indirectly become the pillar of its economy. Therefore, the government seeks to preserve environment and at the same time control the behavior of traders by setting rules regarding trade, agriculture and other commercial activities. Based on the Buddhists moral teachings, profit is not considered as a desire to fulfill self-interest, but rather as a need to bring happiness, prosperity and safety to humans and other living beings involved in their activities. The economy's quality is not only measured from the amount of profit but also from the way it is acquired and accurately distributed. This understanding is certainly based on Buddha's spiritual approach, which emphasizes moral principles so that all humans can liberate themselves from material world delusion and reach wisdom.

Trade and industry are the most important foundation for accounting, which is essentially a function of business itself. As a part of business and economic structure formed by society's culture, accounting grows and develops in a society that also changes with the times (Gray, 1988; Belkaoui & Ronald, 1991). Accounting certainly cannot be separated from human activities, which are closely related to the physical and material world. It cannot be denied that the purpose of business activities, i.e achieving profit, has placed accounting in its role as a financial decision-making consideration.

According to Belkaoui (1983), accounting is indeed designed to achieve certain social goals within a country's zones. The zones of accounting practice is influenced by environmental factors, such as social, economic, political, and cultural where the accounting is carried out. As a result of the environmental factors, accounting concept and practices differ significantly among





countries. Then, the accounting objectives, standards, policies, and techniques used in various countries also differ. It means that the evolution and the development of accounting are highly dependent on the environment (Costouros, 1977). Moreover, Francis (1989) stated that accounting which only pays attention to the materiality can cause its users to worship money. Accounting must be able to reflect a benevolent practice that is able to help its users make moral business decisions. As moral agents, accountants are expected to carry out the values of virtue in each of their actions. Moral values contained in accounting include honesty, concern for the economic status of others, sensitivity to the values of co-operation and conflict, communicative character of accounting, and dissemination of economic information.

The Buddhist principles of *kamma* are shown to bring an important social dimension to Buddhist thinking. The Law of *Kamma* (literally, act or action, but in Buddhism relates to the relationship between good/bad acts and good/bad consequences, both in terms of present life and future rebirth) grounds Buddhist morality in personal responsibility for the consequences of one's actions. Through *kamma* are these actions at least partly oriented towards a social dimension because social contributions generate good *kamma* and are accordingly encouraged (Payutto, 1994). *Karmavibhangga* is a treatise on the basic principles of caution, the ground rules of *kamma* which constitute the essence of Buddhist view of life, death, and rebirth (Fontein, 2010). Therefore, *kamma* provides an element of moral restraint that can assist people to resist the temptation to act on the motives of greed and immediate material gain. Buddhist understanding of human nature is based on the interdependence of all things and the mutuality between cause and effect. Harmony within the social and natural worlds is recognised as essential to the cessation of suffering, necessitating the transcendence of self interest and of the encroachment on others in the pursuit of self interest (Boyce *et al.*, 2009).

Accounting that reflects of Buddhist moral teachings proposes an integral and transformative accounting. Accounting would be understandable, not only the linkages and activities within the material or economic sector but also the relationships with the society and universe (Dillard, 2009). The meaning of accounting in Buddhist context has an ideal goal of self-liberating people from material world to achieve spiritual enlightenment. Based on this interpretation, accounting plays an important role in controlling the moral conduct of people in terms of trading. The determination of *sima* and narrative reliefs about punishment for someone who captures and consumes natural resources excessively provides evidences regarding good moral values contained in accounting and their implementation in business life.

The existence of Buddhist values as a basis of moral attitudes in business activities indicates that traders are required to control their desires of self-interests and maximizing profits. Instead they are expected to practice the values of humanity and honesty and place the universe as a part of themselves. This principle becames the spirit of the economic system, the moral of business practice, and it finally will shape accounting at this period. According to Boyce *et al.* (2009), Buddhist economics as right livelihood provided a valuable impetus to the process of developing viable alternative economics because it emphasizes the importance of developing a more humane approach to economic activity. The concept of right livelihood is one of the requirements of Buddha's Noble Eightfold Path. It is an important component of moral principle,





offering a significant implications in accounting to make an ideal economic decision making (Liyanarachchi, 2009).

Therefore, Boyce *et al.* (2009) defined social accounting as accounting that seeks to take social (including environmental) considerations into accounts, asked for and provided in the context of relationships of accountability between social actors (including, but not limited to, agency relationships). In this research, (social) accounting is not only interpreted quantitatively but also understood more comprehensively covering all aspects of human's life. The numbers reported in accounting cannot be separated from the business and moral conduct of the actors, so the accounting record must be based on moral conduct. Social accounting in ancient Java was interpreted as the manifestation of human's spiritual journey to liberate himself from worldly desire in the quest for supreme enlightenment. This goal will be achieved if everyone practiced the Buddhist teachings, namely the Noble Eightfold Path. In order to improve the spiritual quality, humans need a mandala as their spiritual wheel. Borobudur as a mandala, contains messages of Buddhist teachings in various components of the temple, starting from the floor plan, the shape of the building and narrative reliefs.

Accounting has several characteristics that exist and are relevant to Buddhist moral teachings, such as truth/honesty, fairness, justice (for human and other living creatures without mistreating them), tolerance, and understanding one another. As a unity of virtues, accounting is always practiced as a moral conduct which leads to a more grandeur future in all aspects of life associated with accounting. Accounting with Buddhist teachings is expected to stimulate all users to become a complete human being in every business decisions making. Based on the Buddhist philosophy, social accounting eventually came as an economic control and mediator for conflicts between human beings, their needs, and their environment (Chua, 1986; Carmona & Ezzamel, 2007; Liyanarachchi, 2009) in a holistic manner, which one may experience the process of self-liberation from physical and material world to achieve the supreme enlightenment (an endeavour which man could be assisted being wise). Indeed, it is the experience of achieving harmony between the natural environment and human beings, who are united by love and compassion with everything as those qualities of life are longed for by every human being. These humane values, in fact, add to the vital meaning of accounting in order to maximize all living creatures' well-being.

Conclusion

Borobudur is the icon of ancient Indonesian civilization, a proof to the world that Indonesia was once a major center of spiritual teaching. It is a testimony to the fact that more than one thousand years ago Indonesian civilization had already masterd an advanced level of economic systems, including business trading and accounting. As parts of business and economic structure formed by the society's culture, accounting grows and develops in a society that is certainly associated to the physical and material world. Based on the evidences carved in *karmavibhangga* reliefs, the ancient Javanese economic system was inspired by Buddhism. The Buddhist principles of the law of *kamma* become an important social dimension in personal responsibility for the consequences of one's actions. The system has moral values as the basis for regulating the mindset and behavior of every individual, both as human beings and economic



agents. Based on the Buddhists moral teachings, profit is not considered as the desire to fulfill self-interest, but rather as a need to bring happiness, prosperity and safety to humans and other living beings involved in their activities. The economy's quality is not only measured from the amount of profit but also from the way it is acquired and accurately distributed.

Social accounting in ancient Java was interpreted as the manifestation of human's spiritual journey to liberate himself from worldly desire in the quest for supreme enlightenment. The determination of *sima* and narrative reliefs about punishment for someone who captures and consumes natural resources excessively, provides evidences of good moral values contained in accounting and their implementation in business life. As a unity of virtues, accounting is always practiced as a moral conduct which leads to a more grandeur future in all aspects of life. Based on the Buddhist philosophy, social accounting eventually came as an economic control and mediator for conflicts between human beings, their needs, and their environment in a holistic manner. Indeed, it is the experience of humans to achieve harmony between the natural environment and human beings, who are united by love and compassion with everything as those qualities of life are longed for by every human being.

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