

Accounting Practices and The Use of Money in The Reign of King Udayana in Bali: An Ethnoarcheological Approach¹

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Abstract

The study is an ethnoarcheological approach exploring the existence of accounting practices and the use of money in the reign of King Udayana (the period 989-1011). The period was considered important since it was the golden age of Singhamandawa Kingdom in Bali where King Udayana successfully integrated Bali and Nusa Tenggara, and its influence reached East Java. The King Udayana was a prominent role in the development of economic, social, political and religious values in the people of Bali.

It is concluded that using the ethnoarcheological approach, In the era of the King Udayana, some clear pictures of the existence of accounting practices could be traced. Accounting has been understood in the era in the forms of various forms, including from the economic transaction in the traditional markets and the use of currency in many social occasions, to simple models of record keeping. It is also believed that the King Udayana used religious values to the basis of people social and economic transactions.

It is also found that in the reign of King Udayana, coins as money were used intensively. Coins were printed in gold and silver plates as the local currency used strongly reflected the spiritual contexts which highly respected by local community. Symbols' coins of two similar patterns which were the same between the left and right side on the gold coins depicted the life of the balance between outward and inward or material and spiritual concepts. Similarly, four petals sandalwood flower patterns printed on silver currency as a sacred tree described the four cardinal directions were believed by Balinese that God and Goddess as the guardian of the people who believed in their greatness. Belief in this spiritual foundation was a very important concept to put into practice in order to obtain a balance between material and spiritual life. It is also believed that the accounting practices performed at the era of King Udayana also used the practice of balance. Transactions related to the use of currency trading was done between the kingdom and the villagers as expressed in the inscription showed how the empire really understand the meaning of well-being and balance life.

Keywords: Accounting History, King Udayana, King Airlangga, Ethnoarcheological Approach, History of Money

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1. Introduction

Accounting that occurred in the past is generally understood as an overview of economic and industrial development only. There is also an assumption that an understanding of accounting that occurred in the past is viewed just as the one in the present (Laughlin and Lowe, 1985; Tyson, 1993; North, 1985; Sukoharsono, 1995). This narrow understanding tends to view accounting as an overview of techniques alone, and is not affected or does not have any interaction to its environment, whether political, economic, social or cultural. This resulted in current accounting researches are dominated by the analysis of economic developments and industrial practices. As Sukoharsono (1995) pointed out that accounting was emerged in the business society, it was not only because of industrial development, but it was also cultural and religious influences.

Economic development and industrial practices of developed countries becomes a major concern of accounting researchers. That has been held up as benchmark developments of accounting in the future, ignoring the fact that accounting is actually has been occurred in the past with its own social context. The same thing is presented by Young and Mouck (2006) that history serves as an awareness of how the past can be used to influence the transition of ethical responsibilities from the present to the future.

Historical development of accounting in Indonesia is still rarely expressed except in the golden age of Singosari Kingdom observed by Sukoharsono and Lutfillah (2008), especially the history of the local accounting practices in Bali has never been explored before in the form of scientific research. On the other hand, constructing the accounting practices in the past in various regions in Indonesia provides possibility to make comparison so as to obtain new findings that can be taken for accounting development nowadays to the one in the future.

Accounting practices in the past used as the focus of this study is the currency usage in the reign of King Udayana in Bali in the period 989-1011 AD (Appendix 1). The period was considered important since it was the golden age of Singhamandawa Kingdom in Bali (see the picture) where King Udayana successfully integrated Bali and Nusa Tenggara, and its influence reached East Java. It was proved by his eldest son, Airlangga, reign as a king in East Java. Besides, trade those days experiencing rapid developments proved by trade relations from various regions and islands in Indonesia, even trade up abroad with China and India.

Picture 1: Singhamandawa Kingdom in Bedahulu Gianyar village



Trade that has developed rapidly led to the need of exchange medium for the transaction. The exchange medium is expected to be objects made of durable material, easy to carry, has a certain weight based

on mutual agreement, and has a sign or stamp from authority which stated it as a legitimate medium of exchange called money (Amelia, 2003).

Money becomes fundamental thing for accounting since it not only serves as a means of exchange but also as a monetary unit. Money is used as a means to conduct exchange indirectly as means of payment, unit standard, and exchange medium (Evers: 1986). Information on money is an important marker of accounting artifact as information systems between components that allows people to use it continually, and because the information is expected to exist during the period when that registration, classification and aggregation occurs.

Money as a marker of information has four fundamental characteristics (Swanson, 1988), namely as accounting unit, mobility, certification and value in its relation to new developments in calculating, record, personal seal, weight and measurement. Besides, according to Littleton in Alexander (2002) states that money as a form factor of accounting for the money is as “the common denominator” for exchanges, for there is no need for bookkeeping except to reduce the transaction of a set of monetary values.

In the reign of King Udayana, the use of local currencies in the form of gold, silver, and Chinese kepeng illustrates that at that time there has been a financial interactions that include not only local but also international relations. Looking at the trade relationship, it is possible that there was accounting practices which needs to be explored.

1.2 Research Motivation

Evolution of accounting is generally known from accounting history research in developed countries which is conducted in America, Canada, Spain, England and Australia. The accounting evolution that occurred in these countries is of course adapted to the socio-cultural, economic and political state of respected countries, and that is not necessarily adaptable to the conditions in Indonesia. Up to now Indonesia still see the development of accounting viewed from the terms of Western countries, which do not necessarily have a relationship with its own accounting evolution.

On the other hand different cultures either in terms of political, economic, social and cultural will result in different revelation of the historical accounting development. Research on the accounting history in Indonesia is only conducted by Sukoharsono (1995) and Sukoharsono and Lutfillah (2008) in the golden age of Singosari, so that it is necessary to conduct research in this field in order to give a clear understanding of the initial thoughts of accounting that will be useful as a precursor to the development of accounting research in the future. This is the motivation of researching accounting practices construction in terms of currency usage in Indonesia especially in Bali, in the reign of King Udayana period of 989-1011M by taking ethnoarcheological approach.

1.3 Research Questions

In the reign of King Udayana, accounting practices can be studied from explorations of inscriptions, written assessment, historical objects or cultural traces associated with the use of currency practices. Using an ethnoarcheological approach, accounting practices were explored in the study. Aspects of economic, social, political and religious values are used to find the existence of accounting practices . Based on the above statements, the study focuses a question on “how were accounting practices and the use of money existed in the reign of King Udayana?”

1.4 Research Objectives

The aim of the study is to explore the existence of accounting practices and the use of money in the reign of King Udayana observed by an ethnoarcheological approach. The study is inspired by the study of Sukoharsono and Lutfillah (2008) who explored intensively accounting in the era of the Singosari Kingdom. Differently, this study is for the period 989-1011 where is believed to be older and interested as some inscriptions are preserved relatively well saved in Bali.

1.5 Research Contributions

The results of this study is expected to provide theoretical and practical benefits in the context of early accounting practices in Bali, especially in the reign of the King Udayana. For theoretical benefits, this study is expected: 1) to contribute thought to the development of accounting in the local scope of the existence of accounting practice where it was formed, 2) to add a theory in the accounting report as raises the accounting values of the past, and 3) to add insights to the accounting discipline as the dissemination of accounting knowledge in every field of science such as archeology. For practical benefits, it is hoped that this study to contribute to: 1) the researchers of the historical accounting development research in Indonesia, by considering the role and function of accounting where it is located, so as to raise local cultural values that affect it, 2) for accounting policy makers expected to use the accounting values of the past as the basis for the current accounting policy and the future, and 3) to promote the accounting role and functions extensively with other scientific approaches, namely archeology.

2. Research Method

The study is a qualitative research using ethnoarcheological approach in analyzing the problem proposed. Such approach is used in order to provide understanding of the construction of accounting practices in the usage of currencies applied in the past. Getting a clear picture of the construction of accounting practices in terms of the usage of currencies in the past, it needs a research method that is able to uncover in-depth research question proposed.

Uncovering the accounting practices in terms of the usage of currency in the reign of King Udayana who has embedded a thousand years ago, takes a sharp knife of analysis to be able to construct explicitly the data bits of the remaining artifacts in order to obtain a building form of accounting practice. Accounting research that takes historical data needs the discipline of archeology to uncover archaeological data.

The main obstacle in constructing the past lives is the the existence of data which is limited either in terms of quality and quantity as well as the interpretation of the data itself. However, the basic culture remained primarily in Bali, allowing research with this method is more easily done because the ethnography evidence is quite clear. It is seen from the cultural community that can be traced from the past cultures that brought on the site of Singhamandawa kingdom and *Bali Aga* village (Sukawana) using ethnographic data. The mixture of archaeological and ethnography data generate analysis methods namely ethnoarcheology method.

2.1 Archaeology and Ethnography Data Collection Procedures

2.1.1 Determination of Context, the Site and Historical Research

Determination of context is conducted to the inscriptions of ancient history as written evidence, historical objects and culture trace of the past to support the description of phenomena. All data derived from archaeological and ethnographic research conducted at the site Samuan Tiga Temple, Bedahulu village as the site of the royal Singhamandawa and Gunung Kawi temple as a heritage site of King Udayana. Other research sites used to acquire data is in the Sukawana village which is one of the *Bali Aga*³ village ethnography. Informants in this study are those who really know about what happened in the past such as the historian, *Pengempon*⁴ Pura Gunung Kawi temple, archaeologists as the excavation team and researcher at the Institute for Archaeology Denpasar, as well as Epigrapher.

³ Native Balinese who are not willing to accept the influence of the power of Majapahit kingdom at the time managed to take control Bali, so that they are forced to live in the mountains (Aga means mountain). Bali Aga communities that still exist maintain their original culture, although many cultures want to influence it.

⁴ People who are in charge of maintain and preserving the Pura

2.1.2 Archaeology and Ethnography Data Collection Techniques

In order to produce a construction accounting practices of the use of currency in the reign of King Udayana is based on the pieces of data that do not have a clear context, the necessary data collection techniques are:

2.1.2.1 In-depth interview with The Ancient Historians, Pengempon Pura Heritage, archaeologists and Epigrapher.

Studies using ethnoarcheology approach generally assumes that the observed object can give an idea or interpretation that may have something in common between the cultures of the past with the current cultural phenomenon. In-depth interviews were conducted with the ancient historian who knows and understands the various histories of life, the Pengempon of King Legacy Temple, and the archaeologists. In addition Epigrapher was also interviewed for they could read the inscription which use language and the letters that are not known. In the search of past cultures traces in the Bedahulu village as the site of the Singhamandawa Kingdom, Sukawana village as the site of Bali Aga village, in addition to participating observation of these sites, interviews with traditional leaders and citizens of the local communities were also conducted.

2.1.2.2 Direct Observation of the Archaeology Institute and the Archaeological Museum

Data collection techniques is conducted by looking directly the activities undertaken by the archaeologist and the observation of the artifacts related to the accounting practices of the use of currency in the reign of King Udayana. This technique is done by directly observing the archeological Institute Denpasar and the Archaeological Museum in Gianyar.

Observation to the Archeological Institute Denpasar intended to directly observe the activities carried out by archaeologists in order to produce an archaeological in the form of excavation. An observation to the Archaeological Museum Gianyar is conducted to get direct knowledge of historical relics that have been published, derived from the completed findings of the archaeologist research.

2.1.2.3 Participating Observations in Related Research Sites

In order to improve understanding of the phenomenon observed, the data collection used was participating observation. This data collection technique was used in order to explore deeply the phenomenon observed by participating in the site excavation. Mingle with the community was also conducted at the site of Singhamandawa kingdom and Sukawana village as the site of Bali Aga village.

2.2 Contextual Description and Analysis

The data obtained from documentation, interviews, participating observation, and various other physical artifacts must be explained contextually in order to facilitate interpretation of data. This is conducted for obtaining valuable findings about accounting practices construction of the usage of currencies in those days and obtaining accounting values in the development of accounting practices in the future as well.

Data analysis was performed with qualitative analysis technique with the knife of analysis was ethnoarcheology. Since the data used in this study was qualitative data, there was a need to interpret the data found as to obtain in depth understanding. Interpretation of archaeological data from informant would result in artifacts interpretation on accounting practices of the usage of currency. Interpretation on the ethnographic data taken from rural and community leaders on the linked site generate an interpretation of social reality. The

interpretation of artifacts and the reality of accounting practices in the usage of currency re-interpreted by the researchers, and therefore reflecting findings.

2.3 Research Model

An overview of research methods can be summarized in a model of research. Model of research designed can be seen in Appendix 5 (Research Model). The research model can be explained that this study used ethnoarcheology approach in constructing the accounting practices of the use of currency in the reign of King Udayana. To investigate the events of the past or history, then archaeological data or artifacts, both written in the form of inscriptions and historical studies, and unwritten form of the ancient heritage objects were used. Archaeological data obtained from both direct observations of the archeological institute Denpasar and Archaeological Museum Gianyar as well as through in-depth interviews with the ancient historians, pengempon King Udayana heritage temples, archaeologists and Epigrapher.

The data collection of archaeological artifacts produced an interpretation of the construction of accounting practices of the usage of currency. Since archaeological data encouraged analyzing data contextually only, it required additional data that was possible to explore archeology issues in an explanative way. Therefore, ethnographic data was needed. Ethnographic data obtained by tracing past cultures which were attached to the related site by adapting with the rural communities of Bedahulu village and Sukawana village cultural past.

Ethnographic data generate interpretation of reality towards construction of accounting practices in the usage of currency. The interpretation of artifacts and the reality then was reinterpreted by the authors to produce interpretation of accounting practices construction of the usage of currency. Interpretation of the research results was then consulted to the informants and other data sources to identify and test the truth of the interpretation results as triangulation⁵.

⁵ Triangulation in this case is the way of collecting data from various data sources to obtain valid information

3. Accounting Practices and King Udayana

Accounting practices adopted by the people in Bali in the reign of King Udayana 989-1011M period can be attributed to various aspects. The idea that accounting has been known and applied at that time in terms of dynamic interaction in the social environment. The reign of King Udayana was inseparable from the strong influence of the Queen in running a government that can be seen from the inscriptions that the issuance of which always precedes the name of the empress was written the name of the King. This was different to writing inscriptions issued by the Kings who ruled before and after, the empress did not write the name of Queen on the plaque was removed.

The Singhamandawa kingdom was ruled by the King Udayana in Bali from the year 989 until 1011. He was a King who managed to unite the entire island of Bali to Nusa Tenggara, and even his influence to East Java. Leadership of King Udayana can also be seen from the ability to solve problems that arise in the community, along with the growing influence of Hindu religion and literature on the island of Bali. Some of the records contained in the inscription were written that the leadership of King Udayana gave great attention to the welfare of its people, both materially and spiritually. As in the case of religious belief, King Udayana respected to the diversity of people's religion. It can be seen from the religion that developed at that time, namely Hinduism (Siwa) and Buddhism and their sects or cult variety. Belief in cultural diversity has, as seen from the inscriptions are written by using Gods Nagari letters, letters Kawi and Sanskrit, the ancient Balinese and Old Javanese. Similarly, in the field of welfare, King Udayana delivered the policy to use the tax system and the individual gold for the tax exemption in a place used for the general public. In the running system of government, the King always put the consensus agreement in making decisions and provided an opportunity for citizens to complain directly.

Although the system of government was adopted in the monarchy system, Decision making of King Udayana was more an attitude which was a democratic way with high royal officials as well as by checking directly into the field. Bureaucratic structure of the kingdom during the reign of King Udayana started from the bottom of the village-level official, then it was the official rate at the central level and the last was the King who was accompanied by two groups of Siwa and Buddhist priests. Although people adopted two different sects of religion and belief, the island was secure and prosperous. The fact that King Udayana demonstrated success in uniting the two different religions and their sects grew in Bali-sect so that they can live at ease and at peace. King Udayana has given a high enough attention in the religious field both Siwa and Buddhist religion, which is found in inscriptions which mention the group name Dang Acarya for Dang Opadyaya priest of Shiva and Buddhist monks for the class of (Goris, 1954: 94). So we can say that at that time proved that the community has embraced the two religions were Shiva and the Buddhist religion, which had a high spirituality.

Markets that occurred during the reign of King Udayana were placed in strategic areas, which was easy to perform transactions such as near the palace (central market). The areas were considered dense population included at a crossroads, and in the harbours. The role of markets in the reign of King Udayana was felt the community in order to meet their needs. It was also trade relations between regions and islands. Along with the market exchange tools, there were also traded commodities in the reign of King Udayana, accounting has been known for its people, although still very simple to keep on record of their transactions.

The tax which levied on fees to residents in the reign of King Udayana was already very well known, as widely expressed in various historical records and inscriptions made at that time. Actual tax arrangements issued by King Udayana was set so as not to burden the people. However, the implementation raised many problems caused by the employee in charge of collecting taxes that are sometimes done arbitrarily by increasing the amount of tax payments (Poesponegoro and Notosusanto, 1993: 204-207). Most of the inscriptions were known to contain the King's decision regarding the establishment of a village or region to region Swatantra (in Java called Sima) or the presence of the special land protected by the royal and freed in any form of taxation.

The emergence of accounting can also be seen in the reign of King Udayana to disclosure inscriptions written in ancient Balinese and Javanese to record a wide range of financial transactions, so as to create a social phenomenon with a record and classify events that exist at the time. The use of letters in the reign of King Udayana can be seen from the three stone inscriptions or pillar-shaped monument that dated to the year 835 Saka or 913 AD in the village of Sanur Blanjong. The inscription used two languages (bilingual) namely the Balinese language and Sanskrit language and the use of two kinds of letters were letters and letters Kawi Negari god. Numbering was not a lot of writing that were outlined in the plaque, just that there were some inscriptions that still used the numbering Hindu Sanskrit wear consisting of nine letters are 1, 2, 3, 4, 5, 6, 7, 8, and 9. At the beginning of trade transactions carried out by people in prehistoric times by the exchange of goods with the goods (barter), but some are already using the medium of exchange in a variety of shapes and standard of value, although very simple as in the form of beads, game gear, rock rocks and shells (Suarbhawa, 2009).

In the reign of King Udayana, who revealed in the data some of the inscriptions mentioned that money (see Apendix 2, 3, 4) as a symbol has been used as a tool of the trade exchange. Coinage or coins were more important because of the presence of the ornaments or text contained on both sides. Coin was considered as an artifact that contained the name of the King or the ruler and the rising number of years. Money used in international trade transactions in a currency 'kepeng' brought by the Chinese state in the conduct of trade in Bali. Kepeng was used with consideration of the need for money in small denominations and amounted to much, and easy to carry as it was denominated kepeng hole in the middle there were typically used to bind in significant amounts. Gold and silver currency were usually only held by the kingdom, where this currency had a high value so that it is difficult to use in small-value transactions.

Milestone of the progress of society during the reign of King Udayana started of farming life, farming and hunting for humans at that time already had a settled life in a place and not moved around like in prehistoric times. The livelihood of the population was done by using a way of life worked together in order to carry out the duties and functions as part of the community, and in doing his livelihood. Trade has grown rapidly as evidenced by the various inscriptions were writing about issues related to trade, so it can be said that the economic development of society at that time was more advanced.

4. The Use of Currency

Initially trading transactions by the public before the era of King Udayana conducted through the exchange of goods with the goods (barter), but some are already using the medium of exchange in a variety of shapes and standard of value, although very simple as in the form of beads, teeth of hunted animals, rocks and shells (Suarbhawa, 2009). Along with the trade which has evolved quite rapidly, it required means of exchange for their transactions. Medium of exchange is expected to be objects made of durable, easy to carry everywhere, has a certain weight based on mutual agreement and have a sign or stamp of the authority at that time stating that the object is used as a legitimate medium of exchange called money (Amelia, 2003).

4.1 Money as a Tool of Exchange and Monetary Unit in Accounting

Based on observations in the village of Bali Aga Sukawana, in some traditional markets, it is still found an exchange of cultural goods with the goods (barter) transactions carried out in purchasing. There is a buyer bringing onion in exchange for fish. There are also other buyers who would like to bring bunch of bananas traded with serontong (a tin) of rice. Exchange would occur if the two parties, both the buyer and the seller have agreed on the amount of goods exchanged, and then there was the sale and purchase transaction. In the reign of King Udayana, within the data of some inscription, mentions that money as a symbol was already used as a tool trade exchange. Money is fundamental to the accounting for not only serves as a medium of exchange but also the monetary unit in accounting. International trade transactions in those days used kepeng brought by Chinese traders for trading in Bali. Chinese kepeng is used with consideration of the need for money in small denominations and numerous amounts, and easy to carry anywhere. This is possible

for there is a hole in the middle of kepeng which allows tying up money in greater amounts. Gold and silver currency in those days usually only held by the royal or noble because this currency has a high value so that it is difficult to use in small-value transactions. Coin plays an important role because of the decoration or writing on both sides. Coin is considered as an artifact that contains the name of the King or ruler of the time and the number of publications.

Money as a medium of exchange in those days has already known in Bali either in the form of gold, silver or Chinese kepeng. Based on interviews with Epigrapher and see directly the physical evidence, it was revealed that the gold coins consist of: 1) masa/masaka (mas ma), 2) Kupang (mas ku), and 3) saga (mas sa). Silver currency unit consisting of: 1) masa (ma), 2) Kupang (ku), 3) saga (sa), and the smallest unit 3) piling (pi). Coin was first made in Bali in the 8th century AD made of gold and silver (Figure 4.1 a, b). The form of coins that are made at that time has square with slightly rounded shape in the size of soybean seed for the gold currencies, and approximately equal to kepeng for silver currency, based on the archaeological evidence found by the excavation team of archeological Institute in Denpasar. Based on interviews with Epigrapher and author's observations, it was seen that the gold coins stamped on one side with sesame seeds and the letter "ta" on the other side which stands for tahlil, written in Dewa Negari script which means to pay. Gold currency was rather round-shaped square with the largest unit was masa. In the back part, there are two indentation in which within each indentation contain sort of of two spheres of sesame seeds patterned. As for the meaning contained in the pattern of sesame seeds are Purusa Pradhana symbol means men and women, also means as balance between material and spiritual.

Silver currency was spherical concave with the largest unit has a diameter of 9 mm. Inscribed on one side letter ma or ku written in Dewa Negari. Kupang currency has more concave shape than masa. The other side contains indentation with four petal flower of cendana/sandalwood pattern. Meaning contained in the pattern of sandalwood flowers are a symbol of a wooden flower which is sanctified by the Balinese and it often used as a means of sacred ceremonies and building materials. Meaning of the four corners of the lids is as a symbol of the four cardinal directions, for the Balinese people in every corners controlled by the God and Goddess as to show their magic that protect their people.

On the making of money, Balinese people always relate it with religious sanctity. So the currency is not only intended as a means of exchange and monetary policies, but also contains a symbol of purity so that it is always connected between the financial and purity. These two factors in the past are always closely linked. Sanctity in every religious ceremony and upakara considers financial factors which is the funds. On the other hand, as to financial terms, the sanctity factors are presented both in terms of the currency symbol and financial transactions. So these are two different things that can be harmonized in its implementation.

The calculation of the gold and silver currency in Java by Stutterheim (1940: 17) mentions that 1 kati is equal to 20 suwarna or 20 dharana or 20 tahlil. Then that 1 suwarna or 1 tahlil is equal to 16 masa, and 1 masa is equal to 4 Kupang. If the calculation is further described will result in the sequence value comparison as follows: 1 suwarna = 1 tahlil = 16 masa = 64 Kupang. It is caused by 1 tahlil = 1/16 kati, with calculation of

1 kati = 0.61761 kg, the weight ratio obtained by calculation:

1 suwarna = 0.038601 kg, 1 masa = 0.002412 kg, and 1 Kupang = 0.000603 kg.

In addition to the currency of gold, at that time also known silver currency or usually called as "atak" which has a value equal to 2 Kupang or ½ masa, so the weight of 1 masa is equal to 4 Kupang (Christie, 1994 in Nastiti, 2003: 100). This is caused by 1 masa weighed between 2.4 to 2.5 grams with a diameter of 12-15 mm, and kupang consists of 2 Kupang or 1 atak or ½ masa weighed about 1 to 1.2 grams with a diameter of 10 mm and 1 Kupang weighing 0.5 to 0.7 grams (Nastiti, 2003).

Considering the different sizes of gold coins and silver when it was connected with the accounting practices as a means of payment can be described in a variety of transactions in society at that time. Written

Bwahan B Inscription in the year 1025 AD mentions buying or selling forest land area of 900 x 1100 depa⁶ for 10 masa mas and 10 masa (Goris, 1954:104):

".....ikang alas I burwan haji ri samipa ni thaninya, ring masu 10 pilih masnya ma 10 I paduka haji...hinganya kulwan hnu mula tke panulangan, panjangnya 900 dpa lbanya 1100 dpa....."

Meaning:

"..... bought the hunting woods of the king around his village for 10 mas masa 10 masa to the King ... the west limit is Panulangan, its length is 1100 depa and 900 depa wide"

The inscription explains that the Bwahan villagers were lacking of land for farming and having difficulty in finding firewood and grass to feed their cattle, so that the villagers begged to buy the king hunting forest land around the village. The king granted the request after the villager paid 10 masa gold (10 mas ma) and 10 masa silver (10 ma). The purchase of land if it is converted into the previously reviewed weight will be:

1 mas ma = 2, 5 grams, then 10 mas ma = 25 grams of gold,

1 ma = 1, 2 grams, then 10 ma = 12 grams of silver.

If converted to gold and silver prices nowadays, in which:

1 gram of gold worths Rp 500,000 and Rp 5,000 silver, then:

10 mas ma = 25 grams x Rp 500.000 = Rp 12,500,000.

10 ma = 12 g x = Rp 5,000 to Rp 60,000.

So the total price of land purchased reviewed from its in terms of currency is Rp. 12.560.000. If the land purchased is converted to the land price in the Bwahan village now, then the land area is 900 x1100 depa = 990 000 depa, where:

1 depa = 1, 65 m, then 990 000 depa = 1.6335 million m² or 16 335 acres. If one acre of land in the village Bwahan now estimated at Rp 3,000,000, then the price of the purchased land now worth Rp 49.005.000.000 (16.335 acres x Rp 3,000,000 = Rp 49.005 000,000).

Reviewing the comparison of the conversion done, both in terms of weight of the currency and the area of land, it can be interpreted that: 1) the price of land purchased by the Bwahan village with the conversion ratio of gold prices and land prices nowadays showing that the rise in land prices is not proportional to the increase price of gold, 2) the price of land purchased by Bwahan villagers are very cheap, illustrating that the King gave it solely in the hope of helping people to meet their needs and promote the agricultural sector.

Only by paying a sum of money amounting to 10 masa mas and 10 masa silver, the Bwahan villagers can have land area of 900 x 1100 depas or 1.633.500m² or 16.335 acres. The amount paid by villagers is small compared to the acquired land could make people of that time increase their living standards. The transaction illustrates how the king as a supreme ruler at that time was very concerned about the welfare of his people. The main purpose of the King is to put the people interests in improving their living standards above his own personal interests in hunting activities.

On that basis, it can be interpreted that in the past, government sector implement locality-based accounting, where the people are given the responsibility in managing the assets of the kingdom to be more productive, but people still have an obligation to pay non burdensome price. This is done solely to provide learning for people. These accounting values reflected in the transactions was associated with the governance sector accounting as it covers transactions made by the central government, in this case is the kingdom. Those accounting values are expected to be used as input for the government sector accounting practices currently implementing a centralized financial accounting. Any excess of the current and the resulting Bali belongs to the central government, so the lack of learning and community opportunities in a locality to manage assets.

⁶ A kind of measurement using the length of arm, approximately 1,65 meter

Comparisons that describe other transactions appear in the Dawan A inscriptions 1053 AD (Santosa, 1965) mentions the purchase of 30 buffaloes at a price of 6 Masaka for each buffalo purchased by the King in the desert. Those Buffaloes were given to the Lutungan villagers as capital loan from the King in order to work the land for farming. When harvest time, the villagers were expected to return the cost of purchase (30 buffaloes x 6 Masaka Masaka = 180).

“.....*kbo prana 30 siki, ulih paduka haji anumbas I gurun, yata milu winehaken irikanang karamani lutungan mapakna wwitbitanya inakunya...kbo I mulya ma 6.....*”

Meaning:

"..... 30 buffaloes are purchased by the King in the desert, those are also given to the Lutungan villagers intended as a capital ... one buffalo costs for 6 Masaka....."

Clearer transactions found in the Dawan inscription mentions that the Lutungan villagers were given granted loan by the King as capital as much as 30 buffaloes at a price 6 masa mas (6 mas ma). The provision of loan is intended as a livestock loan given to the people of the Lutungan village in order to plow their fields so people could harvest the rice, because they can not afford to buy buffaloes. Successful harvest of villagers Lutungan meant that residents could eventually pay the loan. In addition, the tax revenue from agricultural empire and other taxes associated with the irrigation fields can later be collected in accordance with the expectations of the kingdom. If the transaction is converted into the currency with a weight ratio of current prices, then the calculation as follows is obtained:

1 mas ma = 2, 5 gram, 6 mas ma = 15 grams, if 1 gram of gold is now estimated to cost Rp 500,000, then the 6 mas ma = 15 grams x Rp 500.000 = Rp 7.5 million per buffalo. For 30 buffaloes as a loan capital by the King was Rp 3.750.000.000.000 (30 buffaloes x Rp 7,500,000). So, 1 buffalo at that time was 6 mas ma at a price of Rp 7,500,000 buffalo are considered very cheap, because a buffalo right now worth at least Rp. 15,000,000, meaning the double price of buffalo used to be. It is as a form of learning and assistance of the King on his people.

Both types of transactions are done using gold and silver currency as the transaction has a high value. Transactions with a lower value for money such as transaction in the purchase of various household purposes that is not possible to use two currencies (gold or silver), it is used in barter and exchange of money from Chinese kepeng or perforated pis.

Trade relation of that time becomes more advanced concerning the relationship to other islands and abroad such as China and India. Along with the arrival of the Chinese people to trade, they brought Chinese kepeng used as a means of payment. Therefore, the use of kepeng becomes popular in Bali because of this trade relationship. The enormous quantity of kepeng resulted in the setting aside of the local currency of gold and silver. Chinese kepeng became more popular means of payment in those days of Balinese society because it has a hole in the middle so it was practical to carry everywhere and not easily lost. Another reason since the gold and silver has large denominations and people need money in small denominations to the have transactions. This was due to trade deals where lower cash value is not possible to use gold or silver currency therefore kepeng was used (Chinese copper coins) called pipis (Figure 4.2). Up to now, the term of currency in Bali is still using the name *pipis or pis*⁷, therefore the current kepeng in Bali right now called by the name of *pis bolong*⁸.

The meaning of the pattern on the upper side of kepeng was Chinese characters that written the name of dynasty which made it with two script as a symbol *Rwa Bhineda*⁹ and *Purusa-Pradana*¹⁰. On the bottom

⁷ *Pipis or pis* is a Balinese term for money

⁸ *Pis bolong* is a perforated money or kepeng money

⁹ *Rwa Bhineda* means two different things

¹⁰ *Purusa Pradhana* means male and female

side there is image of eight petals lotus as a symbol of *Dewata Nawa Sanga*¹¹. In the middle, there is a rectangular round hole symbolizes rotation center.

That currency has been found by people in some areas in Bali and in the excavation of the research team of Archeological Institute Denpasar. Gold and silver currency is stored in the laboratory archeological institute Denpasar up to now, while kepeng is still stored in various temples where it is discovered. The number of gold and silver currency found at most only reached tens whereas Chinese kepeng reached thousands as found in the Kubu Salya village of Bali Aga Sukawana (Figure 4.3). At the time of discovery and research of kepeng in Kubu Salya village, precisely in the Pura Ligundi Cemeng, the writer participated in the process so that can observe the different types of kepeng¹² directly.

Kepeng during the reign of King Udayana had a relatively high rate of exchange value which show Bali trade relations with the outside world (China) has been increasing rapidly. It could also be proved by the discovery of kepeng in relatively numerous amounts made by Tang dynasty (621-907 AD), Sung Dynasty (960-1174 AD), Ming Dynasty (1368-1678 AD), and the Ching dynasty (1662-1796 M). The use of this kepeng is written in Gobleg Batur C temple inscriptions dated 1398 M (Calienfels, 1926:13) which mentions about the offerings of local communities measured with thousands number of money.

Kepeng or perforated Pis has been used as a medium of exchange in Bali for at least 1,200 years ago, and stop being used as a means of payment when Netherlands people come to Bali. When the Dutch rule in Bali in early 1900s, the Dutch Gulden currency flows to Bali and is regarded as kepeng for exchange or trading. Kepeng have significant meanings to Balinese at that time because it deals with all aspects of Balinese life in terms of religious, cultural, social, political and economic. Currently, kepeng only associated with culture in terms of art and religion, while for the social, political and economic its roles are increasingly blurred. Kepeng have a number of varieties since it is made from various different metals and letter. The similarity is that all kinds of kepeng have a hole in the middle used to place a union bind.

Although Kepeng came from China, yet Balinese fully accepted it as their own currency. It illustrates the existence of relationship between culture, religion, economics, politics, society and government. Kepeng in Bali now have a very high value in religious ceremonies and works of art. For example, for a cleanup spot ceremony or marking the completion of a building requires kepeng to be planted at the base of building. Funeral ceremony also required kepeng to be burned. The making of holy statue *Rambut Sedana*¹³ is made of kepeng with *Cilli*¹⁴ shaped. It symbolizes generosity of Ida Sang Hyang Widhi in providing fertility in this world.

In addition, the Balinese calculation system has a direct relationship with kepeng. For example, the words "fifty" in Balinese is *seket* derived from a word "se" means one and "ket" or tie means to tie something into one unity. So it can be said that the use of currency gold, silver or kepeng are closely related to mathematical and economic concepts of Balinese.

4.2 Reflection of Accounting Practices "Symbol" of Currency

Reviewed from material aspect, the currency in the reign of King Udayana was using the currency which was measured by its material either made of gold and silver. Based on the understanding of currency symbol, it was more related to spirituality. The development of era eventually led to accounting practice transactions that use money as medium of exchange. Money has always been interesting thing for discussion in ancient times until now. Beside barter, the use of money as a medium of exchange has also been made in the reign of King Udayana. Money may be accepted by society at that time as a medium of exchange and

¹¹ *Dewata Nawa Sanga* is eight different direction with each god

¹² Types of Kepeng obtain from excavation by Archeological Institute Denpasar consists of Chinese kepeng from 8-19 AD, Japanese kepeng from 12-19 AD, and Vietnamese (siam) kepeng from 12-18 AD

¹³ Rambut Sedana is a holy statue that made from kepeng as a symbol of fertility and prosperity

¹⁴ Cilli as a symbol of Sang Hyang Widhi generosity in the forms of beautiful woman

monetary units because of the guarantee from the kingdom. Kingdom created gold and silver currency with various units as the local currency in Bali. Gold and silver as the local currency at that time also uses certain symbols that actually have a very significant meaning.

Symbol of sesame seeds pattern on the gold currency for example, when viewed in terms of its shape may not mean anything and did not show any art side. Yet, deep down the meaning contained in the pattern of two sesame seed is a symbol of Pradhana Purusa (male female), which describe the source of life. Without the men and women, it seems there is no life in this world. In addition, other meaning contained in the pattern of sesame seeds are that the left and right side of sesame seeds have the same shape and balance, so that it means the accounting practices construction must be based on balance. Balance here has extensive meaning, as well as in terms of accounting practices that business life is not solely emphasizes on the material benefits but spirituality as well. Similarly, in making financial statements have to be based on balance where it is not only about a report describes the calculation of the figures, but also consider social accounting, environment, and spirituality as well.

Symbol four petals sandalwood pattern depicted in silver currency were also has deep meaning when explored further. Beside the fact that the sandalwood tree which is sacred to Hindus in Bali, it also could be interpreted from the number of the petals. The four petals represent the four directions of the compass. For Hindus in Bali, each direction is occupied by the god and goddess who use their magic to protect their people in the world.

Accounting practices related to the use of money as a medium of exchange and monetary units, is expected to be guided by the various symbols indicated on it. Overall, the symbols in the currency can be interpreted as follows: if you always remember and be guided that all things are His and will return to Him in the practice of accounting in any transaction, the transaction will be done with His Mercy and in accordance and his guided path. The guided path is the path of goodness, honesty, sincerity and simplicity of life that ultimately is the road to emotional and physical well-being. If all people, be it businessmen, government officials and all people using this concept, then there is no such thing as crime, corruption and other misconduct. Nowadays many people only see that money as one of the external factors which are considered as the most important factor in life, then forget about the harmony between the outer and inner wellbeing. So the accounting practice run by humans should always be referred to the symbol found on ancient currency that reflects harmony and balance between physical well-being (material) and inner happiness (spiritual).

5. Conclusion

In the era of the King Udayana, some clear pictures of the existence of accounting practices could be traced. Accounting has been understood in the era in the forms of various forms, including from the economic transaction in the traditional markets and the use of currency, to simple models of record keeping. It is also believed that the King Udayana used religious values to the basis of people social and economic transactions.

History of accounting practices on the use of money as a medium of exchange and monetary unit were closely associated with the symbols printed on the currency. The symbols were printed in gold and silver currency as the local currency used strongly reflected the spiritual context which highly respected by local community. Symbol of two similar seeds patterns which were the same between the left and right side on the gold coins depicted the life of the balance between outward and inward or material and spiritual concepts. Similarly, four petals sandalwood flower patterns printed on silver currency as a sacred tree described the four cardinal directions were believed by Balinese that God and Goddess as the guardian of the people who believed in their greatness. Belief in this spiritual foundation is a very important concept to put into practice in order to obtain a balance between material and spiritual life. It is also believed that the accounting practices performed at the era of King Udayana also used the practice of balance. Transactions related to the use of currency trading was done between the kingdom and the villagers as expressed in the inscription showed how the empire really understand the meaning of well-being and balance life. The release of land assets of the

royal capital and lending transactions in the form of livestock in certain rural communities were used as an illustration of an example in the existence of the practice of accounting.

5.1 Limitations of The Study

Since the data sources in the form of artifacts that have been embedded thousands of years ago have not been able to describe clearly how the actual form of accounting practices at the time. The meaning of the accounting practice in the study was conducted based on the interpretation of the inscriptions might be considered not yet described maximally the real forms of accounting practices that occurred in the reign of King Udayana.

This study also has limitations in the use of primary data sources in the form of inscriptions, in which Balinese considered it as sacred so that making it difficult to explore more data from the inscriptions. On the other hand, the inscriptions were written in either ancient Balinese or Javanese letters which are not commonly used, as well as many of the inscriptions is no longer intact, so there are some text in the inscriptions that are not legible to Epigrapher. Thus, it resulted in the difficulty for the writer to describe the contents of the inscription and its interpretation clearly.

5.2 Implications of The Study

Getting a full picture of history of accounting practices in the reign of King Udaya that occurred in the past would require more research in this field. Historical Accounting research in Indonesia is newly conducted on a study that explores the history of accounting in Singosari Era. It is expected that the next study of accounting history will take another period and topics of discussions, so that the integrity and clarity of accounting construction in the early history of Indonesia can be clearly revealed.

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APPENDIX 1

CHRONOLOGY OF ANCIENT BALI KINGS

- 1) 835-837 S / 913-915 M.....Sri Kesari Warmadewa
- 2) 837-864 S / 915-942 M..... Sri Ugrasena
- 3) 877-889 S / 955-967 M..... Sri Haji Tabanendra Warmadewa
- 4) 882-897 S / 960-975 M..... Jayasingha Warmadewa
- 5) 897-905 S / 975-983 M..... Sri Janasadhu Warmadewa
- 6) 905-911 S / 983-989 M.....Sri Wijaya Mahadewi
- 7) **911-933 S / 989-1011 M..... Sri Gunapriyadharmapatni
& her husband Sri Dharmodayana Warmadewa**
- 8) 933-944 S / 1016-1022 M.....Sri Sang Ajnadewi
- 9) 944-947 S / 1022-1025 M.....Sri Marakata Pangkaja
- 10) 971-999 S / 1049-1077 M..... Paduka Haji Anak Wungsu
- 11) 1001-1010 S / 1079-1088 M.....Sri Walaprabhu
- 12) 1010-1023 S / 1088-1101 M.....Sri Sakalendukirana Wijayottunggadewi
- 13) 1037-1041 S / 1115-1119 M.....Sri Maharaja Sri Suradhipa
- 14) 1055-1072 S / 1133-1150 M.....Sri Maharaja Sri Jayasakti
- 15) 1077-1099 S / 1155-1178 M.....Sri Maharaja Sri Jagajaya
- 16) 1099-1103 S / 1178-1181 M.....Haji Jayapangus Arkajacihna & his wife
- 17) 1122-1126 S / 1200-1204 M...Sri Maharaja Haji Ekajayalancana & the queen
- 18) 1126-1182 S / 1204-1260 M..Bhatara Parameswara Sri Wirama & the queen
- 19) 1182-1218 S / 1260-1296 M.....Bhatara Parameswara Adidewalancana
- 20) 1218-1222 S / 1296-1300 M.....Rajapatih Kbo Parud
- 21) 1246-1247 S / 1324-1325 M.....Bhatara Sri Mahaguru & grandchildren
- 22) 1250-1259 S / 1328-1337 M.....Sri Willajayakrtaningrat & the queen

List of Pictures:

1. The Site of Singhamandawa Kingdom in Bedahulu Gianyar village



PURA SAMUAN TIGA, DESA BEDAHULU SITUS KERAJAAN SINGHADWALA

2. Gold and silver currencies



3. Chinese kepeng currency (Chinese copper coins) called pipis



4. Thousands kepeng found in the of Kubu Salya Sukawana village



5. Research Model

