CORNERSTONES OF ACCOUNTING HISTORY - II

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Abstract

The aim with this study, "Preaccounting History Roots" title presented on "Accounting: View From The Past Into The Future" named International Scientific Conference in Saint-Petersburg on 11-12 April 2013 and "Cornerstones of Accounting History" title presented in Istanbul on May 2010 with The 2nd Balkans and Middle East Countries Auditing and Accounting History Conference dealt with preaccounting history is intensified in parallel with the innovations of civilization and the title of the new Anthropology studies and other interdisciplinary fields.

The originality of the study, especially the "History of accounting is as old as civilization" approach is at perspective made sense to provide. Hence with the help of recent reviews and discoveries addressing the study of accounting or account problem with Paleolithic Age history of the thematic, chronological, social, dialectical and geographically specific areas are examined and discussed with details.

The findings of this study contributes clearly to the provision of information to users in the light of scientific developments examined accounting and accounting activities of the human history of the origins and evolution of the process of producing intelligent and tools, and new findings. Now, in the light of the findings obtained and based on data from Paleolithic Age quest of existence of intelligent people and the findings interpreted the signs left behind in the process comments. Thus, historical information of the accumulation of actual accounting with as a contribution to the future arises occurs as more successful integration.

Implications for the study are discussed on homo sapiens sapiens who live in peace with himself lines the walls of the cave, and marks the bones-shell-stones with the notches, rope-like instruments taken by nodes in the account until the grasp of life, and make it easier for control signs, symbols in the formation and operation phases.

Key Words: Preaccounting, Preaccounting History, Accounting, Accounting History

JEL: M41, M49

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Introduction

The new archaeological findings make reviews useless which didn't base on documents about the history of accounting. This should put an end to the conflict. Then the recent archaeological finding and their materialist technical reviews with accounting history shall be referred to Paleolithic Age.

In 2010, The 2nd Balkans and Middle East Countries Auditing & Accounting History Conference in Istanbul was presented a special title "*Cornerstones of Accounting History*". The study dealt with the subject on the accounting history of the world from different perspectives and approaches are studied by us. At the study presented with name of "Cornerstones of Accounting History", accounting history are explicates and examined with the 40-thousand-year history of thematic and chronological details and evolutionary approach to dealing with the dialectical process of development. And this study is a continuation of improving on aforementioned article's basic study.

The aim of this study is to contribute to the efforts to provide lighting on accounting historical roots alleged to have a history as old as civilization, the process of evolution by taking an approach interdisciplinary among others archaeological discoveries, historical reviews, technological assumptions, and taking into account the anthropological work relationships and interaction with other disciplines.

The same study taking away accounting history as old as the 40-thousand-year is to aim to expand its horizons enriching with more movement that is a bit older than that time and traces its roots in the past. At the mentioned study, accounting history the 40-thousand-year of study of the development processes have been seemed to study by grouping four parts. Accounting history of the beginning accepted as "15- thousand-year, with the invention of writing 3000 - 4000 BC" at the former approaches discussed in this study is adjusted by placing a logical and dialectical process of evolution. New findings basing on more perspective on old arguments a convergence of accounting history is enriched and updated in this study.

Cornerstone of Accounting History named article is discussed four basic areas. The first basic process of accounting history is examined accounting, account, accounting and the most important means of numbers and the emergence of numbers. In this study, "*pre-accounting history"* called in the form of the Paleolithic Age period with new findings are examined in an evolutionary process.

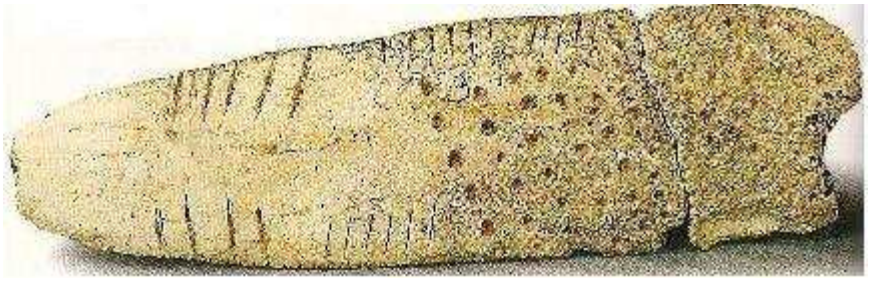
The period, the current accounting activities, accounting historical origins and evolution of the account will be enabled better detection and understanding. In this study the process of production activities with the smart and thinking human beings with their own needs and social needs of socialization markings (notches on the stones, side by side with the lines in the walls of the cave, until the notches on the bones) will be examined the formation and operation processes.

For example, as The History of Computing Project is written, the first tools used for calculation aids were almost certainly man's own fingers, and it is no coincidence that the Latin word "*digit*" is used to refer to a finger (or toe) as well as a numerical quantity. As the needed to represent larger numbers grows, early man employed readily available materials for the purpose. Small stones or pebbles were used to represent larger numbers than fingers and toes, which had the added advantage of easily storing intermediate results for later use. Thus, it is no coincidence that the word "*calculate*" was derived from the Latin word for pebble: calculus.



Picture 1 Counting with fingers at ancient times
http://www.thocp.net/timeline/0000.htm

When connection with the help of the light of developments in other disciplines with each other is established, account and accounting can be examined with production life of people and the potential positive and historical contributions.



Picture 2 counter bone from Ancient time, http://wishpowers.com/898#.UW_dWUbdO-Z

There have not been much source data that has reached today and that is enlightening the data user about math created by Homo sapiens lived in prehistoric ages. The history of known of math or numbers is that starts with that of modern men's that can be accepted as close to today. It is known and admitted fact that maths and calculation take a vast place in the life of men that have lived in touch with nature and achieved to continue their existence until today by surpassing it in many fields. This indication shows that the history of calculation, numbers and maths should go down to older times than supposed. It is known that men of the period living in caves and tree holes, became familiar with the calculation and maths thanks to the nicks and lines engraved on cave walls, stones, bones and tree pieces. These findings and similar commentaries have been some of signs that counting action and even counting notion are daily needs and actions in the prehistoric eras. Men succeeded in taming animals and produced paint from the mixture of various substances in different scales and proportions and wanted to know the quantity of the animals that they possessed, felt the need for calculation to count and amount with calculi-like objects, stones and clay scales and dices. With the help of these data and with archaeological and anthropological findings that are unearthed day by day even they are very limited, the need of men in their life adventures for calculation and recording and grouping and thus accounting has been become clear.



Picture 3 Kerbholz – (30.000 BC); Mayer, Jan, Die Geschichte der mechanischen Rechenhilfsmittel, http://www.rechenhilfsmittel.de/kh_curta.pdf

According to the data and information that are get through some tribes that live their primitive lives without technological developments even in today in Australia islands, South America and Africa, it has been confirmed that these tribes use numbers, simple and complex math when compared to their position. With this approach, it shows that these tribes that are personifications of prehistoric eras that have reached today feel the need for counting, calculation and maths to ease their lives in the prehistoric times as it is in today.

The Middle Stone Age, the period of geological time used by archaeologists to describe the period of human evolution from the ending of the Mesolithic Ice Age phases to the beginning of sedentary farming, arts and human remains have been hold a mirror the period. Ancient residual that was found in the excavation made during University of Witwatersrand Institute for Human Revolution researches in Klasies River Cave, South Africa and that was definitely created by Homo sapiens creating lines on and the fragment of 8 cm long whose large part sheared off seen in Picture 4, set another example of prehistoric times. It is concluded as a result of the X-ray florescence and microscopic analyses that the finding presumed to be 100.000 years old was made deliberately by men or man.



Picture 4 Ancient Mesolithic Notched Stone (100 Thousand Year Old and Found in South Africa) – 8cm http://blog.everythingdinosaur.co.uk/blog/_archives/2012/02

It not exactly known that various sharp stone tools on which there 7 lacerations and that were showed a few little shallow linear characteristics were made by the same person or by different engravers. There is also that these large and small lines that were deliberately made were formed for a certain aim.

The Blombos Ocher Plaque is a great example. Dating to around 75,000 BCE in South Africa, this stone contains clearly organized markings. Photo below courtesy of Smithsonian Institution, Chip Clark. Thousands of years ago, humans began recording information on objects, such ocher seeing picture. This ocher plaque has marks that may have been used to count or store information. A close-up look at the object shows that the markings are clearly organized. However it's difficult to identify exactly when decorations on rock became systematic patterns containing representations of information. And this systematic pattern suggests to some researchers that the markings represent information rather than decoration.



Picture 5 Source: http://homepage.uludag.edu.tr/~basri/ ders/2008-.pdf
Figure: First Hunters and Accountants

The life and existence adventure of men have continued its existence going through various phases during the long and complex history in strong communication relations within specific norms. Thinking men, Homo sapiens being one of the important steps of evolution, have been in communication during the periods that they continue their existence and have been in relation to the activities made for meeting the needs. Human beings, discovering taking notes of required information that needs not to be forgotten while they live active lives, have served in the generation of numbers, being a cornerstone and foundation pier of today's maths with this way and methods, and Picture 5 thus, digits. For example, it is the cave man of 100.000 years before that showed representatively in the Picture 5.

A hundred thousand years ago, human meeting the needs of everyday life, producing and consuming, began to put mark and to shape objects in this process.

To give a shape to the objects has transformed into facilitating tools of primitive human manufacturing operations at the process of production. This tool production has transformed into knowledge on Homo sapiens. The intellectual accumulation began at the primitive sense. However, these human were quite far from such a detailed describe of it.

The cycle of people, Homo sapiens, learned to draw and break and cut and shape to hard substance and soft substance. One of the best examples is Blombos Plaque Ocher. It is estimated that ocher, which is founded in South Africa, is 75,000 years old thanks to the help of dating technique. This stone has been expertly worked with very fine precision. It is exactly contained unsolved signals on. The lines on ocher make a clear expression that Homo sapiens have had the other tools to make the scratches.

In the process, in order to count the human has used more than straight lines. Thus, the lines and marks on a piece of stone have turned into symbols. These symbols used for expression something and communicate with each other primarily in closed communities. It is also a message to those outside the community, and the meaning of communication. In this process, people arrange the lines and symbols to determine the amount of the number of objects, which they own.



Picture 6 Dating to around 75,000 BCE in South Africa, http://eduscapes.com/history/beginnings/10000bce.htm

New archaeological discoveries and findings indicate that Homo sapiens use cave walls in the domain of communication and, as communication tools, stone, bone and wood in pre historic. The era of media as a means of primitive lines, they provide the first images and symbols through communication. Then lines turn the twist and shorten and lengthen. Thus they transformed into signs and symbols. This evolution has created the first steps easier, accelerated according to the need of communication between them.

Communication Homo sapiens of each other is concentrated in parallel batches between the passages of the built-centered life. And thus, the emergence of communication tools produced led to. The growing population of Homo sapiens accelerated communication and ideas have evolved intensified in war and peace in their own communities and foreign.

Due to the growing needs and owned things of Homo sapiens, they first led to distinguish “a lot and few". Later they discovered to distinguish single and plural. Covering a long period of time in the process, at the same civilization sections in different geographies in different historical stages of human clusters of symbols but similar to the marks and numbers of lines were required to use. At the different geographies, it is relatively different historical

stages of social development processes, but also symbols similar to the human race, counting lines and signs created pre-conditions. And it paved the way. In other words, modern accounting initiated to live in the first stages.

Homo sapiens began keeping the first counting records directed to identify and domesticate animals in prehistory. These records are sometimes scratches and marks on a piece of a rock, and sometimes a piece of wood from scratches, sometimes in the form of a slurry symbols on the tablet.

These examples are the cornerstones of today's accounting. These examples, which are primitive numbers as the same time, are well-preserved examples of the 5 and 10 and 12 number clusters. Period in 1937, one of the oldest dated materials found was the scoreboard bar in Czechoslovakia during excavations at Vestonice. This log was a young wolf 7-inch-long forearm bone. It has notched notch 55 on the bone. The first 25 of them are divided into groups of five. At the end of the series, the previous one notch notches were twice as long. These signs are considered to reflect one by one, counting and grouping the same time.

In addition, some researchers in Austria even today show that the tribes do not have the words to count. For example, when asked a parent living here how many children have, they answered that "many" to means more than one. Indeed, there are really four children.

Time Table of Accounting History

"Cornerstone of Accounting History" named article is discussed four basic areas. The first basic process of accounting history is examined accounting, account, accounting and the most important means of numbers and the emergence of numbers. In this study, "*preaccounting history"* called in the form of Paleolithic Age period with new findings are examined in an evolutionary process.

Table 1; Accounting History Eras - Arranged by us.

Middle Paleolithic Era	First Era – Preaccounting Era
Upper Paleolithic Era/ Neolithic Era	Second Era
Post - Modern Era	Third Era
Modern Era	Fourth Era – Modern Accounting Era

Conclusion

This study is an important milestone in the journey of preparation for global accounting history. And also, this study is a cornerstone, which accounting belongs together with the mathematics and other sciences into the world of accounting history. At the same time, this study is an expression of the process of reproduction of needs of millions of years of human evolution and human existence. Homo sapiens laid the foundations of knowledge and theory when producing practice.

And then they managed to the higher stages of production with the accumulation of the intellectual. This process can be summarized in terms of intellectual study with “Number produce accounting and accounting manages numbers.”

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