
Recordkeeping in Mesopotamia

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Belnadinshumu, one of the Murashu sons, set out from his Nippur home to the scribal quarter, a path he took frequently. There he would hire a scribe to write out the guarantee he wanted. He wore a spiral silver bracelet from which he'd pay the scribe and was followed by a slave who carried several bags of grain and dates for the witnesses who could use them to buy what they might want in the market. One of his sons was enrolled in the scribal school but it would be several years before he could be deemed sufficiently educated in the several languages needed and in the many forms and requirements for all the business dealings of the city – adoptions, marriages, purchases, rentals of lands and boats etc. He hoped his son might eventually secure a position in the temple or perhaps even in one of the palaces of Artaxerxes in Sippar, Babylon or Uruk. It remains to be seen – life is uncertain.

Belnadinshumu made his living, like many of his family, renting properties to farmers who annually paid him in dates, barley, or other crops they grew. They had no silver and certainly not gold– few people did, but grains, animals, and other produce and items created by hand could be exchanged for silver at the city gates monthly. Most had no need for silver – simple exchanges of grain or of favors were sufficient to secure the basic needs of the poor. He walked by two of his rental properties and could see water glistening in the irrigation ditches, palm trees heavy with dates and new growth sprouting in the fields. Whole families worked along with a few of their own slaves. They were responsible for maintaining the life-giving irrigation ditches, keeping the rented oxen healthy, as well as managing crops.

He had purchased a lovely ring with a rare stone for his wife after she had given birth to his first living son. He wished to insure the setting. The jewel had cost him plenty. He arrived at the scribal quarter, walked up to a scribe he'd used before, and negotiated a fair price for the work – 1/8 of a shekel of silver. The scribe sent his apprentice off to the jewelers' section of the town to fetch the jewelers who had cut and set the stone. They were expecting to be called that day. Upon their arrival the scribe set to work creating two virtually identical clay tablets, one for each party. He reached into a deep clay container grabbing an amount of barely damp clay. This he formed quickly into a simple rectangle and, taking his stylus, he inscribed the words as dictated onto the damp clay along with his own name. Then he repeated this with another lump of clay. When he completed the work on the two tablets – both of which fit easily into his palm – he called over another scribe to read the inscriptions aloud to be sure that both were the same and that both parties were satisfied with the wording. Corrections were made as needed and could be made as long as the clay remained somewhat damp. In the heat of the day, the tablets were drying quickly. Once dry, no changes could be made and the tablet could last forever, even without baking. As soon as everyone was satisfied, the scribe called out for witnesses and seven people appeared, some were other scribes, some simply were people who hung around the scribal quarter making a living as witnesses. The scribe read the inscription aloud:

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Belahiddina and Belshunu...and Hatin...swore to Belnadinshumu, son of Marashu: "As concerns the gold ring set with an emerald, we guarantee that for twenty years the emerald will not fall out of the gold ring. If the emerald should fall out of the gold ring before the end of twenty years, 'we' shall pay Belnadinshumu an indemnity of ten mana of silver."

(Hilprecht, 30)

The names of the seven witnesses were immediately added to the tablets and they applied their seals or thumbprints. Belnadinshumu passed out his bags of grain and dates to the witnesses and broke off the 1/8th of a shekel of silver from his silver bracelet for the scribe, and both he and the jewelers took their tablets home and stored them away.¹

This work introduces accounting historians to a sampling of bookkeeping technologies and a sampling of some records over three millennia left to us on clay tablets in various cuneiform scripts, from modern day Iraq and Iran, the ancient empires of Persia and Babylonia, the cradle of civilization, the Biblical home of Adam and Eve, the motherland of the ancient and legendary – but very real - cities of Babylon, Sumer, Ninevah, Persepolis. It will look at the subjects of these records. For those familiar with pre-modern bookkeeping, these types of records will be familiar. They are primarily receipts and contracts. There are also records of inventory, of payments to workers, of temple receipts both single transactions and compilations of many transactions. These have been studied by scholars of ancient history, classics and archeology but only occasionally by accounting scholars (Mattesich, 1998, Vollmers, 1996, Ezzamel, 2002, Keister 1963, Schmandt-Besserat, 1982, 1992). Garbutt, in 1984, published a wonderful introductory article on the importance of Mesopotamia to accounting history but it did not result in others following his lead. Why these records have been studied only erratically by accounting scholars may be due to issues of language and familiarity, to preferences for capital market, behavioral and auditing research and to even to the attitudes of some accounting historians who view this as mere antiquarianism (Napier, 2006). The absence of double entry bookkeeping may have deterred some from imagining that the ancient world had anything to say to modern accounting. This author chooses to view these undertakings as links to the past – seeing how the ancient world, in some ways, was similar to ours in their need for technologies that helped their societies function. Indeed, it appears that accounting or recordkeeping was so essential that it surely ranks, especially when viewed through the scribal lens, as one of the oldest professions.

The original scholars who studied these tablets did not translate all of them for the casual reader. Rather, it is typical to find translations of a selection of representative texts – say 20 out of 120 texts discussed in an article or expedition report. So, for our purposes, the samples are small. Sometimes there are no translations at all, merely ink drawings or photographs of all tablets under consideration. They may assume that the only people reading their work would be those knowing the ancient languages just as we assume our readers to be accountants or capital market researchers assume statistical literacy on the part of their readers. These records are all cuneiform writings on clay tablets – a virtually indestructible technology that has brought us more information on the

¹ For information on the use of 'ring' or 'spiral' silver as money, as well as commodity money (grain etc.) see Powell (1996, 237).

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ancient world - pre 300 BC - than we have on much younger civilizations whose records were kept on perishable papyrus, parchment or leather.

“The essential ingredients of civilization are three: cities, capital, and writing” (Hallaq, 1996). The essential ingredient of recordkeeping is simpler: capital. As long as there has been owned property, there has been recordkeeping. Selling a house or an ox? Records are needed. A person commits his herd to a shepherd for safekeeping – both will want evidence of the animals in the initial herd, the number who died, and how many were born. Lending and borrowing demands evidence of ownership and amounts owed. People want receipts for required offerings of tribute, tax or other offerings to the ruling elite. In any community where bartering or any type of credit transactions take place and require time for settlement, where services are rendered or products given up in return for goods in the future, records are needed. It is not so much a matter of trust, although trust is important, but one of memory.

Basu et al., (2009, 2009) demonstrated experimentally that ‘recordkeeping improves memory of past interactions in a complex exchange environment, which promotes reputation formation and decision coordination.’ This study established what intuition would tell us: people invent processes that ensure that the reciprocal elements of transactions are honored. It suggests that when the informational demands of a transaction or an economy exceed the limits of memory, records will develop. The creditor wants evidence of the debt and the debtor wants evidence that he paid it. That assurance strengthens trust and encourages further transactions, which fosters the growth of the economy. Indeed the 2008-2009 problems with credit caused a spiraling inward of the world’s economy as banks feared to lend and people feared to spend.

Recordkeeping preceded writing – so necessary was it in a world of ownership. Recordkeeping does not imply the existence of a complete accounting system as understood in the modern world but at least a record, of an amount and a commodity and evidence of the identities of parties. Schmandt-Besserat (1982, 1992) studied records – clay tokens - dating from as early as 8000 BC. She proposed that these clay artifacts or calculi represented simultaneously quantity and commodity such that a large triangular token might represent not just a goat but five goats and a small one, one goat. Eventually the idea of quantity was separated from that of commodity enabling counting to be applied to any object. Thus, in time, a symbol of a goat, would be followed or accompanied by quantity symbols. She theorized that this led to writing – an attractive theory to accountants but one that is contested (Lieberman, 1980 and Shendge, 1983, 1985).

However, this is not a paper on the origins of writing but of recordkeeping. What is known is that the earliest extant records are records of account, that throughout all recorded history accounting records have existed. Whatever the recordkeeping method, it showed what was valued by the individual and the society. Methods of monitoring and tracking property were created and their existence suggests an instinctive principle of organization out of which arose accounting and bureaucratic systems.

True writing had developed at least by 3300-3100 BC. Almost simultaneously, archives, rooms of organized records, and actual libraries, dating from as early as the third millennium BC develop (Brosius, 2003). These archives and libraries contained the records of states, temples and businesses. Processes of accountability are endemic to all social organizations across human history (Carmona, 178). As Willmott (1996, pp. 24, 26) has noted, “Accountability is a widespread phenomenon that occurs whenever people

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strive to account for their experience-in-the-world ... Accountability is at the center of human relations and interactions.”

There is no clear distinction between recordkeeping and bookkeeping. Most definitions of bookkeeping include the words financial or financial records, but recordkeeping is not so limited. Are inventory ‘counts’ bookkeeping, or only recordkeeping? A fully realized double entry system is not critical to the claim that bookkeeping is present but is it necessary to at least maintain a single entry system? A stored receipt is a record kept, but that transaction, entered into books, is bookkeeping. Is bookkeeping only worthy of the name if it involves journals and ledgers? If instead, all the receipts representing similar transactions are organized on a shelf or kept in a jar but not entered into a ‘book’ – is that recordkeeping or bookkeeping or some hybrid form? Many common business documents not normally so named are indeed receipts. A mortgage, a rental agreement, a warranty all are receipts. We keep these records and store them away but we would not claim that we were keeping ‘books.’ An archeologist sifting through papers surviving from a twenty-first century home would discover much of what this society valued through these kept records: titles to property, insurance on property, payments to the government, passports, birth, adoption and death certificates. They would find much that was personal as well but would realize that the values of the twenty-first century AD overlapped considerably with those of the third millennium BC.

The archival historian familiar with documents prior to the twentieth century knows that bookkeeping was a component of everyday life. Indeed, even individuals who may have been functionally illiterate kept simple books because of a lack of ready cash and an inability to settle exchanges immediately. People lived on credit. The tradesman sold dry goods but had to wait until harvest was in or until some other reciprocal favor could be performed. Receipts abounded. Both parties to an exchange received a receipt and when the transaction was settled, more receipts were issued or the originals were signed as settled. It appears that most people – since few were ‘employed’ in the sense we know today – kept simple books. A ‘day book’ was used to record each day’s financial events: to whom amounts were owed or from whom they were expected. The day book is closely related to the ‘general journal’ – a chronological listing of economic events. Generally, if the transaction were settled immediately such that cash was exchanged for a good, no entry was made. The daybook of a blacksmith was primitive but sufficient to track his customers’ receivables and payments (http://www.osv.org/explore_learn/document_viewer.php?DocID=145). The recordkeeping-bookkeeping of the ancient near east demonstrates commonalities between the ancient and the modern.

The twenty-first century man in western cultures is uniquely distant from bookkeeping at an individual level and getting more so as technologies develop. Credit cards obviate a need to keep records. The debit card directly transfers money to the vendor. People are swiftly moving away from check books in favor of on-line bill paying systems. Other entities keep and provide them with records. Is it any wonder that students today struggle with basic bookkeeping? They are disassociated from it to a degree not shared by at least their grandparents.

Since literacy was limited, but documentation needed, a substitute for personal literacy had to evolve. Scribes served that purpose. Scribes were schooled from an early age and the historical record contains many of the texts used to teach them including word lists and practice tablets with the teacher’s words on one side and the student’s on the other (Lucas, 1979; Tinney, 1998). Once educated, some scribes likely gathered at a convenient location where they could be hired and practice their profession. Others were

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employed by the temples and royal or noble families. Temple scribes may also have served private needs. The ordinary person with the need for a written document or to have someone read a written document would hire a scribe, going to the area of the city where scribes did their business. The scribe came “to occupy a strategic position in his several roles as temple functionary, court secretary, royal counselor, civil bureaucrat, commercial correspondent, poet and scholar” (Lucas, 1979, 305).

Nippur excavators named one area Tablet Hill or the Scribal Quarter for the large numbers of tablets found there – administrative, school texts and literary. Since then tablets have been found all over the city (Gibson, 1993). Nevertheless, we know there were schools and archives and it is most likely that there was an area or areas where scribes congregated to do business. Many tablets state that the transaction described therein will be settled at the “XXX” Gate. So gates of the city, where trade takes place would have been a likely spot for scribes to set up shop. Today there are areas in many countries where scribes set up their tables and chairs for business – where they could write a dictated letter or document, read one, witness another. Ezzamel (1994) writes of the training, position and duties of the scribe/accountant in Ancient Egypt. Kalman (1999) discusses these practices in modern Mexico, where they have existed since at least the 16th century. Scribes are still found in Peru, Iran, China, Pakistan and India (Kalman, 11-12). Modernity continues to make use of scribal technologies: notaries, tax accountants, lawyers. It was as recent as the 1980s that many degree candidates would hire a professional typist for their theses. What is more scribal than a businessman dictating a letter to a secretary? Using a scribe, therefore, does not necessarily imply that a client is illiterate. The client may be seeking expertise, knowledge of proper forms, appropriate writing style, speed and the availability of witnesses. The education of scribes in ancient times was a long process involving language acquisition, an understanding of and facility for mathematics, measurements, volumes, as well as the requirements of legal documentation. Going to a location where scribes normally set up shop facilitated the business and literary needs of the general public.

The technology used as a signature was the seal or its substitute (sometimes a thumbnail impression). Cylinder and stamp seals have been found throughout these areas and throughout time and examples can be found in any number of museums around the world. Seals were applied to the damp tablets according to a tradition of the bureaucracy involved. Sometimes many seals were applied, particularly when witnesses were involved. Sometimes the same seal is applied over and over for unknown reasons – perhaps to prevent another seal impression? When a debt is recorded the seal is that of the debtor. When a transaction is carried out by an agent of another, the seal is that of the agent. (The use of seals has not disappeared – recall the seal of the notary, the seal of a university on the diploma of a graduate). When a commodity is delivered, the seals of both the deliverer and the receiver may be present. There is a rich literature on seals and their uses (Garrison, M. and Root, M., 2001, Hallock, 1969, 1977, Shendge, 1983, Boardman, 1998). Hallock (1969) when referring to the use of seals on the Persepolis texts, which are the remains of a massive bureaucratic system of ration distributions in the Achaemenid Empire, says that if one does not see the difficulties associated with understanding the use of seals through that empire, then one is not truly familiar with them.

People of the ancient world kept records to replace memory, facilitate transactions, protect property rights. (Basu and Waymire, 2005). They had access to scribes to allow everyone, no matter their level of literacy to participate. More compelling yet - ancient

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law codes demanded written contracts. These codes, which were undoubtedly preceded by others, suggest that, prior to their enactment, life must have been very risky and chaotic. The most familiar of the ancient law codes is the Code of Hammurabi (Hammurabi), dating from ~ 1700 BCE (the dating is contestable). Predating Hammurabi by a generation are the Laws of Eshnunna. (The oldest extant law code is that of Ur-Nammu dating from 2100-2050 BCE. It is brief.) The similarities suggest that the laws had been compiled over long periods of time. Of interest to this work is the centrality of documentation and witnesses in business.

Code of Hammurabi – translated by L.W. King:

7. If anyone buy from the son or the slave of another man, **without witnesses or a contract**, silver or gold, a male or female slave, an ox or a sheep, an ass or anything, or if he take it in charge, he is considered a thief and shall be put to death.
9. If anyone lose an article, and find it in the possession of another: if the person in whose possession the thing is found say "A merchant sold it to me, I paid for it before witnesses," and if the owner of the thing say, "I will bring witnesses who know my property," then shall the purchaser bring the merchant who sold it to him, and the witnesses before whom he bought it, and the owner shall bring witnesses who can identify his property. The judge shall examine their testimony--both of the witnesses before whom the price was paid, and of the witnesses who identify the lost article on oath. The merchant is then proved to be a thief and shall be put to death. The owner of the lost article receives his property, and he who bought it receives the money he paid from the estate of the merchant.
10. If the purchaser does not bring the merchant and the witnesses before whom he bought the article, but its owner bring witnesses who identify it, then the buyer is the thief and shall be put to death, and the owner receives the lost article.
11. If the owner does not bring witnesses to identify the lost article, he is an evil-doer, he has traduced, and shall be put to death.
12. If the witnesses be not at hand, then shall the judge set a limit at the expiration of six months. If his witnesses have not appeared within the six months, he is an evil-doer, and shall bear the fine of the pending case.
104. If a merchant give an agent corn, wool, oil, or any other goods to transport, the agent shall give a receipt for the amount, and compensate the merchant therefore. Then he shall obtain a receipt from the merchant for the money that he gives the merchant.
105. If the agent is careless, and does not take a receipt for the money which he gave the merchant, he cannot consider the unreceipted money as his own.
122. If anyone gives another silver, gold, or anything else to keep, he shall show everything to some witness, draw up a contract, and then hand it over for safe keeping.
123. If he turns it over for safe keeping without witness or contract, and if he to whom it was given deny it, then he has no legitimate claim.
(<http://avalon.law.yale.edu/ancient/hamframe.asp>)

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Laws of Eshnunna – translated by Albrecht Goetze:

40. If a man buys a slave, a slave girl, an ox, or any other valuable goods but cannot identify the seller, he is a thief.

The Code of Hammurabi and its ancestors developed from need. Hobbes' image of the life of man without government as 'nasty, brutish and short' can be glimpsed behind these apparently draconian laws (Leviathan, Chapter XIII, 1651). Why such an extreme demand for documentation and witnesses unless properties had been seized with abandon, force and frequency? Hammurabi anticipated by 3500 years the Statute of Frauds (passed in England in the 17th century) which required written and signed documentation for many transactions including dealings in goods over a certain amount of money, marriage, contracts lasting over a year, and transactions involving land and real estate. Who today could, or would dream of buying a house or car without documentation? Indeed, we swim in documentation. In Colonial America, as early as the mid 17th century, personal accounts (records of ownership and obligation) could be used in filing or contesting claims of debt (Wootton, 2004, 41) – hence the superabundance of receipts found in archives.

Despite the law, there was fear of fraud. To combat this, within the world of clay tablets, the technology of the 'case' tablet developed for unsettled transactions – records of liability. The seal of the obligated party would be on the envelope. A tablet inscribed with all necessary information was encased by a clay envelope. The envelope bore the same information as on the enclosed tablet in addition to the necessary seals of the parties and witnesses. Seals – ancient signatures – were found on the envelopes rather than on the enclosed tablet although the enclosed tablet might have seals as well. Enclosing a tablet with a clay envelope was ingenious. The 'case' tablet would remain in the hands of the creditor. The creditor might be able to change something on the envelope but could not change the enclosed text because by destroying the envelope, the seal of the debtor would be destroyed. So this system protected the debtor from subsequent attempts to change the document by the creditor. There are tablets that state that when the obligation is completed the 'seal' is to be destroyed. i.e. from 1267 BC, in the Kassite dynasty "Fifty gur of grain of the full tax from B and I out of the Nippur storehouse, N, the son of S has received, and given to families. On the day of harvest he shall gather, and shall pay; whereupon his seal he shall break" (Clay, 1906, 25)



Clay tablet from Alalakh still in clay envelope with seals applied to the lower left corner. Dated 1720 BC.
(http://upload.wikimedia.org/wikipedia/commons/3/30/Cuneiform_legal_tablet_in_case_from_Aleppo.jpg)

From the book of Jeremiah (whose life is dated around 650 BC and lived in Jerusalem):

10. And I subscribed the deed, and sealed it, and called witnesses, and weighed him the money in the balances.

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11. So I took the deed of the purchase, both that which was sealed, containing the terms and conditions, and that which was open;
12. and I delivered the deed of the purchase unto Baruch the son of Neriah, the son of Mahseiah, in the presence of Hanamel mine uncle's son, and in the presence of the witnesses that subscribed the deed of the purchase, before all the Jews that sat in the court of the guard.
13. And I charged Baruch before them, saying:
14. Thus saith the LORD of hosts, the God of Israel: Take these deeds, this deed of the purchase, both that which is sealed, and this deed which is open, and put them in an earthen vessel; that they may continue many days. Jeremiah 32:10-14. (Jewish Publication Society translation).

Hammurabi's laws or the same necessities that created those laws applied in Judea. The writing (documentation), the witnesses, consideration, filing away and, apparently a case envelop. The deeds: that which is sealed and that which is open. The sealed deed was encased to protect it from fraudulent manipulation. The open deed, which would have the same information, letting the reader know what was in the sealed case. Similar to declaration of contents attached to a package shipped overseas.

The very ancient (8000 BC) tokens described by Schmandt-Bessarat (1992) were often found with clay bullae in which they were enclosed. Thus, another envelope. On the outside the shapes of the tokens were impressed so that one could tell what was in the envelope. This prevented one party from changing quantities or qualities of the objects agreed upon.

A simple filing technology first found around the 7th century BC beginning in the Neo-Assyrian period and continuing through the Seleucid period is the use of Aramaic docketts (inscriptions) on, usually, the sides of a cuneiform tablet. These docketts referred only to the subject of the tablet and the obligor involved thus, they were short and to the point. They were sometimes inscribed but it is clear they were inked. Consequently, because of the deterioration of ink, how we cannot know how widespread this was. While most scholars are interested in this because of Aramaic itself – its development and spread and its eventual replacement of other languages – in this case, our interest lies in its use as a filing device. The scribe/librarian would add the docket to the side of the tablet after the fact, file it on a shelf making it easy to find when a debt was settled. We know there were libraries and archives and there had to be methods of relatively simple retrieval of documents. It would be easier to find something specific by scanning written words on edge than to flip through many awkward cuneiform tablets just as we use raised tabs on files in our file cabinets.

Another filing technology was use of jars or other, perhaps, cloth or leather containers for filing purposes. In Persepolis (~500 BC), an abundance of clay tags have been found referring to a particular type of transaction or location and a date attests to this (Hallock, 1967, Vollmers, 1996). In the archive room in Assur, tablets were found in several jars some of which jars were inscribed with descriptions of the content dating from a much earlier period ~ 1200 BC (Postgate, 2003, 127). Also refer again to the Jeremiah 32:14 quote above: the speaker instructs Baruch to place the deeds in an earthen vessel.

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Whether containers were tagged or actually marked, both tell us that filing practices were in place and that these practices had been in existence for millennia.

Archeological remains from Ebla (2400-2350 BC) attest to shelving where tablets were stored in an organized way (Archi, 2003, 33). Referring to discovery of tablets on an expedition in Nippur in 1893-4, Hilprecht(1906, 1) wrote: 'In several instances the tablets were placed on their edges, reclining against each other.'

Temple Archives of Nippur – dated from the Cassite period (1600-1150) B.C.:

No examples will be given but many tablets represent receipts for tax revenues (grain) collected and delivered by agents to the temple, others record loans out of the temple inventory with payment and interest requirements noted, others record payments (e.g. grain, seed, sheep, wool, sesame) to temple officials probably for salaries. Interestingly the latter tablets appear to note which taxes these payments are coming from – that is, which inventory of grain. "Grain from the storehouse, out of the interest grain of the tax from the town X, he has received." Perhaps these agents could only receive a salary if they collected enough grain tax so that they could be paid. Finally there are large tablets representing payrolls. They must be compilations of other records because they cover many months. Tablets are sealed. In the case of loans, the seal is that of the debtor. For salary payments, the seal is that of the bursar – he who distributed the payments (Clay 1906).

First Dynasty of Babylon: chiefly from Sippar:

The first examples of tablets come from ancient Sippar in Iraq dating from the 18th through the 16th centuries BC. The city of Sippar was located on the Euphrates River and was inhabited at least from the third millennium BC through the first. Thousands of tablets have been found but most were not excavated by trained archeologists but have nevertheless been collected in museums. Their provenance has been identified not by an excavation site but by the names of people and kings, and in many cases, the name of the city itself in the tablets. Many name the sun god Shamash, who was the chief god of Sippar where his major temple was located. Marduk, also attested, was the patron deity of Babylon but came to be known as the chief of all gods when Babylon came into ascendancy.

From 1582-1562 BC:

1½ SAR of E-RU-A, not rugguhu, situated in Sippar-jahrurum, which on the former tablet had been designated as E-KI- GAL, on one side adjoining the house of Hungulum son of Nahium-ekalli, which he had bought from the sons of the bara priest Ramman-idinnun, on the other side adjoining the street – its front being toward the place of the Isinites, its rear toward the house of the scribe Warad-lbari son of Warad-Mamu – which in the year "when king Ammi-ditana.... the protecting deities" Hungulum son of Nabium-ekalli had bought from Ii-iqisham son of Ali-lumur for 6 5/6 sheqels, including the SI-BI, – (this house) the Shamash priestess Iltani daughter of Ibi-NIN-SHAH has bought with her money from Ungulum son of Nabium-ekalli. She has paid seventeen sheqels of silver, as its full price, and one-half of a sheqel she has made as a SI-BI. Her deed is closed. She is satisfied. For all future days they shall not complain against one

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another. The spirit(?) of Shamash, Aja, Marduk, and of the king Ammi-zaduga they have invoked. *Follow the names of ten witnesses and the scribe.* (BE, Ranke, 20)

This is a purchase contract for a large, 54 square meter, house (SAR = 36 square meters). Its location is precisely denoted just as in a modern real estate contract. The term 'rugguhu' is untranslatable (Not improved? Not furnished? Not zoned for business? Not occupied?) The 'former tablet' refers to the previous ownership contract when Hungulum bought it from Li-iquisham for 6⁵/₆ sheqels. Just as required today, this was a title search. Inflation or improvements to the property account for the increase in price since the prior contract. The Priestess was happy to pay 17 sheqels. The ½ sheqel SI-BI is likely to have been a good faith deposit (earnest money) or tax payment required upon the transfer of property. In front of witnesses and in the name of gods and the king, the priestess vows that this contract satisfies her and stands. The date is known to us because of the name of the King (compare with the reference to God in the Jeremiah quote above). The tablet also bears the seals of the parties and witnesses. While simpler than documents prepared in a modern real estate transaction, all the essential elements are present. The contract is in writing, the parties competent, there is an offer and an acceptance, the property is clearly identified, consideration is present and a price agreed upon, and signatures are given. In addition, as is typical in United States state laws regarding real estate, there was a title search and apparently earnest money given.

This document compares nicely to a modern warranty deed combined with a very simple closing statement. A modern warranty deed states that the seller (owner) conveys to the buyer (for consideration) all rights to a specified piece of property and attests to its clear title. The deed also names the prior owner. It is witnessed, dated, signed and (in the state of Maine the word "seal" is appended – old habits die hard). The closing statement of course, defines the consideration. The only obvious difference swearing that the ancient contract is valid in the name of God or ruler and the modern one is valid according to the state.

From 1683-1640 BC:

One and ⅓ gan of field, "good" land, the field of the Shamash priestess Mellatum daughter of Ibkuša – the scribe Marduk-mubalit has rented from the Shamash priestess Mellatum, the owner of the field, in order to cultivate it, at the rate of six gur of grain on one gan. At harvest time he shall pay six gur of grain at the gate of Gagum. One sheqel of silver she has received out of the rent of her field.

This contract is a copy of an original or the interior of a case tablet. The original was surely in the priestess Mellatum's hands. The witnesses and their seals would have been on the envelope. Once the payments were complete, the case would be broken. Once broken, the contract was complete. It was usual for trade to occur at the gates of the city – hence his payment at the gate of Gagum (BE, Ranke, p.22). After delivery of that grain at the gate, the priestess or her agent could then sell the grain. At the gate therefore was at least a farmer's market and possibly a place to exchange currency, hence also a place where scribes could be found since any exchange would require a receipt.

From 1748-1729 BC:

One slave, by the name of Ina-gati-Shamash, the servant of (the?) GAL-SHAG-GA, Adajatum son of Abu-waqar has bought from his master (the?) GAL-SHAG-GA. He has

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paid the money according to his full price. The bukanu has been transferred. For all future time they shall not complain against one another. The spirit(?) of the god Marduk and (the king) Sin-mubalit, the spirit(?) of Bel-tabi and his consort(?) they have invoked. The names of five witnesses follow (BE, Ranke, 19).

This is a receipt for the sale of the slave Ina-gati-Shamash. Although the price is not disclosed, that it was a fair price is attested by swearing on the god Marduk and the king Sinmubalit, as well as doing so in front of five witnesses. The meaning of bukanu is unsure but it appears to be a synonym for the ownership title to the slave, or an actual transfer of name of the slave at a central registry of the city, Sippar. That the term has a legal aspect beyond a simple private sale/purchase is demonstrated by the fact that the word, bukanu, is found in many other similar tablets where property is transferred (BE, Vol 6, 22). Almost all tablets are witnessed by several people as well as that of the scribe. The king and the gods are called upon as well as human witnesses. Note that 2000 years later, basic form of the contract has remained the same.

From 1840 AD:

Receipt for \$500.00 payment for black slave – United States.

Caption on item: Receipt given Judge S. Williams of Eufaula by Eliza Wallace in payment of \$500.00 for a Negro man, Jan. 20, 1840. This paper is owned by Richard Malcolm McEachern, grandson of Judge Williams.

“Recd of Judge S. Williams his notes for five hundred Dollars in full payment for a negro man named Ned which negro I warrant to be sound and well and I do bind myself by these presents to forever warrant and defend the right and Title of the said negro to the said Williams his heirs or assigns against the legal claims of all persons whatsoever. Witness my hand and seal this day and year above written. Eliza Wallace [seal]”
http://en.wikipedia.org/wiki/File:Slave_sale.jpg.

There are innumerable tablets recording a creditor/borrower relationship. In one case grain is borrowed and in another, silver. In both cases, the principle and interest is to be repaid. The grain tablet specifies the amount of interest whereas the silver does not. Perhaps this means that interest on silver was a known, standardized amount. Alternately the amount may have been included on the tablet given to the borrower. (Ranke, 1904)

From the 5th century BC, Nippur

Fascinating texts have survived from the Murashu family from the 2nd half of the 5th century BC from Nippur in modern day Iraq from the reigns of Artaxerses I and Darius II. The Murashu family archive, with over 850 tablets, was discovered in 1893. It contains the business records of that family over about 50 years. They were primarily involved in leasing and renting properties but some other types of transactions are attested. This is one of the largest collections of a private family’s business practices from ancient times.

Bagamire, son of Mitradatu, spoke of his own free will to Be-nadin-shumu, son of Murashu: my orchard and uncultivated land and the orchard and uncultivated land of R my deceased uncle, situated on the bank of the canal Sin and the canal Shilihtu, together with the dwelling houses in the town of Galiia, on the north adjoining the property of N, son of N, and the property of B of Nippur on the south adjoining the property of M son of B on the east bank of the Canal Sin, on the west the bank of the Canal Shilihtu and adjoin

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the field R, secretary of Artaremu, all I will give you for 60 years for rent and for planting it with trees, hold the orchard for a rent of 20 gur of dates and the uncultivated land for planting it with trees. B, son of M accepted his offer and for 60 years to hold the orchard and the uncultivated land, his portion and portion of his deceased uncle, the orchard part for a rent of 20 gur of dates and the uncultivated part of plating it with trees. Each year in the month of Tishri, B shall pay the 20 gur of dates to B as rent... From the month of Nisan of the 37th year of King Artaxerxes that property is held for 60 years for rent and planting it with trees by B son of M (Hilbrecht, 37).

Note the extraordinary length of time covered by this contract – a 60 year rental that includes land and houses. In return, the rent is 20 gur of dates annually, plus cultivating land with tress. The properties are bounded by canals, hence water is available. The reader must assume that there will be adequate excess dates or other cultivars to make this a profitable venture for the renter.

25240 sundried bricks to be paid by Eriba son of N, bel-nadin-aplu, son of B, Ninib-ah-iddina, son of A and Ninib-ana-bitishu, son of L to Bel-nadin-shumu, son of Murashu through his slave Itti-bel-pashar. In the month of Tammuz of the 37th year in the town of Ninib-aparishu they shall make the bricks, 25340, accurately count and deliver them at the brick shed. From the 25240, 11000 are due from Eriba, 5700 from Bel-nadin, 4280 from Ninib-ah-iddina, 4260 from Ninib-ana-bitishe. Names of 10 witnesses and scribe follow (Hilprecht 1898, 35).

This contract seems one sided. There is no obvious consideration for these bricks. It appears to be a 'joint venture' of sorts with four people involved in the making of bricks but no reasons for the different brick requirements and no payment to them. Did they jointly buy something previous to this contract? Were they 'sentenced' to this brick-making chore?

Shum-iddina, son of P, spoke to Rimut-Ninib, son of Murashu, thus: Let me put two of my oxen with two of your oxen into your pasture lands, and everything, as much as in those fields grows, by our work of irrigation, is ours in common. Afterwards Rimut-Ninib complied with his request and gave him oxen and seen; ox for ox, seed for seed. They have sworn by the king that whatsoever grows in it, shall be divided equally among them. Names of four witnesses and the scribe. (Darius II, year 1 Elul 24th 424-404 BC) (Clay, 1904, 29).

A true joint venture between two men who contribute oxen and seed to split the result. The only question is the land, which appears to belong to one of them, does not affect the distribution of proceeds. No time limit is noted.

10 gur of barley, invested in a business venture by Enlil-sum-iddin, son of Murasu, is owed to Arad-enlil, son of Iddina, by Hannija, son of Iddin-bel. In month 11 of year 29 he will pay that 10 gur of barley, measured by the measure of Arad-enhil, at the granary gate in Nippur. This obligation is in addition to previous promissory notes debited against him or Iddin-bel, his father. Six witnesses, one scribe (Month 1, day 2 year 29 Artaxerxes) (Stolper, 2001,88).

Hannija, with his father as guarantor, owes barley to Arad-enlil who had given his own grain on Hannija's behalf to Enlil for a business venture. Hannija must bring the grain to the granary gate where Arad-enlil will measure it using his own measure. Hannija and his father owe more than this as is noted clearly. There is to be no question that this is an additional debt, it is not a replacement for other debts.

These private business records of the Murashus differ greatly from those from Persepolis where 'rationing' sums up that bureaucratic empire. The Persepolis

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bureaucracy tracked the movements of food commodities and the ration allocations of foods to people (workers, travelers, and royalty or nobility), animals and temples (for offerings). The rations are usually grain and wine but sometimes fruit and cattle. The tablets track insignificant amounts of commodities as well as massive quantities being distributed to large workgroups in the area around Persepolis and extending to but possibly overlapping with another administrative system in Susa (324 miles away). (Hallock, 1969, Vollmers, 2009, 94). Two examples (out of thousands) follow.

PF 708: 360 Bar of grain, supplied by Pirtis, on behalf of the king, horses consumed. At Bessime. In the 22nd year. Haturka was the grain handler. [single seal]

PF 1213: 7 ½ Marris of wine, supplied by Ibaterra, Marriyadadda received, and gave it to post partum women, whose apportionments are set by Ustana. 6 bearing male children received each 1 Marris. 3 bearing female children received each 5 qa (1/2 Marris). [2 seals]

The Persepolis personnel organized the tablets by type, year, location and person where appropriate and transferred their information to single large tablets. These appear to have functioned as documents of responsibility accounting since the large tablets were organized by supply depot. They also sent accountants to audit accounts, to ensure that documentation for transactions was present, and to count the inventory of supply depots. When documentation was not available, that fact is noted in the record. There was a system in place that had similarities to modern day auditing (Vollmers, 2009, 101).

Conclusion

The cuneiform documents from Mesopotamia, engraved on a virtually indestructible material, provides modern researchers with an immense inventory of written records covering several millennia. Indeed, there are far more written materials from this period than from the next 1000 years because of the change in writing technology from clay to papyrus/leather/paper – all easily destroyed. These records are not only economic – business or bureaucratic memoranda – receipts, contracts, inventory lists, taxes and payrolls. There are letters, literature and art as well. There is much to be studied and much has been studied. There remains plenty of research opportunities for the accounting historian despite the absence of pure double-entry bookkeeping: systems of organization in empires, understanding what was valued, types of small businesses and how they operated. The use of seals in the Persepolis bureaucracy has proven to be a rich area of study in the workings of the Persian Empire.

In this paper we can see that what we require today as documentation for major purchases also required by these people. This suggests that human nature has changed little over the millennia – we have always needed legal mechanisms to minimize simple error or fraud. Documentation, witnesses and seals/signatures were required. The ancestor of the modern accountant is clearly the scribe – at least part of his training and or duties included accounting – understanding arithmetic, comfort with language and terminology, ability to listen and communicate and knowledge of proper format and documentation. We accountants should look with pride at the importance of our discipline to all of history. We should also stand amazed at the ingenious ways the accountants/scribes of the ancient world invented to organize materials that were awkward in large numbers. They compiled information from smaller tablets onto large ones. They filed related tablets in jars and on shelves. They placed labels on the jars.

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They wrote with ink on the sides of tablets so they could easily find documents – much as we use tabs or labels in file cabinets. They kept libraries. They developed the ‘case’ envelop early on to mitigate against manipulation of a written contract. Double-entry bookkeeping was impossible in a world of clay tablets that dried quickly but it was also not necessary in a world of very small businesses and bureaucracies.

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Biographical Sketch

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