
**Metal Tools in Unpublished Cuneiform Texts
from Early Dynastic Period**

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Abstract :

The people in ancient Mesopotamia know many minerals (Metal Tools) , and they also know how to manufacture it and used them . Minerals have entered in many of their businesses and industries , even in the field of producing artworks (artifacts) . Pots and agricultural tools as well as weapons they used in everyday life .

The most important of these metals are : gold , silver , copper , and tin , which some of them entered in the work of bronze bullion (Al-Jader , 1991 , p.225) .

The ancient Mesopotamians struggled to get the materials , they were carrying the tired journeys in order to bring the raw materials from far away counties , among them were Dilmun , Magan , Meluhha , Egypt and Anatolia (Levy , 1986 , p.19) .

So we did not care about the all kinds of minerals , but we define our works about one type of this metals , which is a copper metal . So the copper regarded the first mineral which known to the people of ancient Mesopotamia , they used it very much in their lives , this had been a major turning point in the history of their civilization (Louis , 2008 , p.112) .

Key words : Mesopotamia , copper , trade , pots .

Introduction :

Copper is mentioned in the Sumerian language as (URUDU) and in Akkadian language as (erû) (CAD , E , p.321). Copper had been widely used for its ease manufacture and methods , so the cuneiform texts mentioned many types of copper as (heavy , crushed , cast , raw copper , medium quality or pure and oxidizer) .

That the first used of copper in ancient Mesopotamia for the first time was synchronized with the manufacture of agricultural tools as (sickle , dagger , knife) and as a weapons also as (arrow heads , and spears or bayonets) .

It seems that the used of copper in its natural form was in ways without heating , the process of fusion had been known since Jamdat Nasir period about (3000-2800 BC.) , so the merchants were bringing it from Magan , Dilmun , and Anatolia (Potts , 2006 , p.25) .

What matters to us here is that the copper appeared in many unpublished cuneiform texts , which kept in Iraqi Museum , all of

them related to sale and purchased of many copper pots and from different types , as we see below :

Read and translation of cuneiform texts :

No. 1

IM- 104647

Mes. = 2.8 x 2.6 x 2 cm.

Obv.

1- 1 ^{urudu}ḥa-[zi]
šubur-tur

Rev.

iti 6
4 mu

Translation :

1- One copper vessel (pot) , from the type of *hazi* .

2- (to) Šubur-tur

3- The sixth month

4- The fourth year .

Commentary :

1 - URUDU : as a symbol sign referred to copper or anything made from copper , this synonymous in Akkadian as (*erû*)⁽¹⁾ .

2 - ḥa-[zi] : A Sumerian word refer to (copper tool) in general , and if the writer of this text intended to write it as (ḥa-zi-in) may be this mean (a cooper ax) , this synonymous in Akkadian as (*ḥaššinnu*) , it is considered as a very important tool , which that have been used since early times , especially in the furniture industry and other works . Also appeared in different sizes as (blade with one edge , or with two edges) .

3 - iti : A Sumerian word refer to (month) in general , this synonymous in Akkadian as (*warḥum*) (Sum.L. , p.130 ; CAD , A/2 , p.259 a)

4 - mu : A Sumerian word refer to (year) in general , this synonymous in Akkadian as (*šattum*) (Labat , MDA , p. 63 ; CAD , Š/2 , p.197 , a.).

No. 2

IM- 204612

Mes. = 3.2 x 3.2 x 1.8 cm.

Obv.

Col. I

1- 1 ^{urudu}ḥa-zi
nam-ti

Col. II

lugal-giš-lu₂-ni ?
mu-[na]-da ?

Rev.

- 5- 4 mu
6 iti

Translation :

- 1- One copper vessel (pot) , from the type of *hazi* .
- 2- (from) Nam-ti
- 3- (to) Lugal-giš-lu₂-ni
- 4- To added
- 5- The fourth year .
- 6- The sixth month .

Commentary :

1 - mu-[na]-da : A Sumerian verbal form , which mean (to added) as follow : (mu-) a tool for verbal sentence in Sumerian language , (-na-) it's an infix for past tense , (-da) is the Sumerian root for (add , or to add) and also mean as (with or beside) , this synonymous in Akkadian as (*itti*) (Labat , MDA , p.155 ; CDA , p.136-137).

No. 3

IM- 204587

Mes. = 4.3 x 4.3 x 2.6 cm.

Obv.

Col. I

- 1- 1 ^{urudu} a₂-gar
1 ^{urudu} ḥa-zi nagar

Col. II

- 2 ^{urudu} ḥa-zi tur-tur
edin-si
5- gub₃-abzu

Rev.

- iti 6
4 mu

Translation :

- 1- One copper vessel (pot) , from the type of (a₂-gar)
- 2- One copper vessel (pot) , from the type of (*hazi*) to carpenter .
- 3- Two copper vessel (pot) , to (Tur-tur)
- 4- (from) Edin-si
- 5- (to) gub₃-abzu
- 6- The sixth month
- 7- The fourth year .

Commentary :

1 - Nagar : A Sumerian word refer to a job (carpenter) in general , this synonymous in Akkadian as (*nagāru*) (Labat , MDA , p.231 , no.560), the carpenter was like the rest of the craftsmen works as an affiliates belong to the temples or to palaces , at least until to end of

the second millennium BC. , beside appeared as a private workshops
(Mieroop , 1977 , p.179).

No. 4**IM- 49767**

Mes. = 8 x 7 x 2 cm.

Obv.

Col.I

- 1- 1 urudu [ma-na]
[x dug]-urudu
[x-ki]-bir₇
[xx] i₃ ma-na
- 5- si-[x]
10 urudu ma-na
[x] bir₇-mu-šul
[x] ud-urudu
[x dug]-urudu

Col.II

- 10- 53 urudu ma-na
si-[x]
2 gu₄
aš-gan-a
2 dug-urudu
- 15- si-abzu(ZU.AB)-a
1 gu₄
lal₃-amar
2 dug-urudu
lu₂-nam-na
- 20- 10 gu₄
[.....]
[.....]

Col.III

- 2 dug-[urudu]?
1 [gu₄]
- 25- gal-lu₂
2 dug-urudu
gi-urudu
2 urudu-[...]
1 dug-uru[du]
- 30- si-[x]
20 [.....]
2 dug-urudu
[.....]

Rev.

Col.IV

- [x] gu₄
 35- si-su-ama
 3 urudu-dug
 gal-zu-kur₂-dim₆
 [si₄-šeš]
- Col.V
 gan₂ ^den-[lil₂] 1 (šar₂) 6 (bur₃) 1 (eše₃) 4 (iku) apin
 40- 5 gu₄
 17 dug-urudu

Translation :

- 1- One *Mina* of copper
- 2- [...] vessel of copper .
- 3- [...] - kibir
- 4- [...] *Mina* of oil
- 5- Si- [...]
- 6- 10 *Minas* of copper
- 7- [...] bir-mushul
- 8- [...] vessel of copper
- 9- [...] jar of copper
- 10- 53 *Minas* of copper
- 11- Si- [...]
- 12- Two oxen
- 13- Ashgana
- 14- Two jars of copper
- 15- Si-abzua
- 16- One ox
- 17- Lalamar
- 18- Two jars of copper
- 19- Lunamna
- 20- 10 oxen
- 21- [...]
- 22- [...]
- 23- Two jars of copper
- 24- One ox
- 25- Gallu
- 26- Two jars of copper
- 27- Giurudu
- 28- Two (*Minas*) of copper
- 29- One jar of copper
- 30- Si- [...]
- 31- 20 [...]
- 32- Two jars of copper
- 33- [...]
- 34- [...] ox

- 35- Sisuama
 36- 3 jars of copper
 37- Galzu-kurdim
 38- Si-shesh- [...]
 39- The field of Enlil (about) 1 (shar) 6 (bur) 1 (eshe) 4 (iku)
 of ploughed lands .
 40- 5 oxen
 41- 17 jars of copper

Commentary :

This text relates with numbers of copper pots and jars , and receives a ploughed lands and oxen to several people , may be to work in this fields which belong to Enlil temple .

1 - mana : A Sumerian word refer to the weights (*Minas*) and its equal to (60 sheqel) about (505 g.) (Labat , MDA , p.157) .

2 - dug : A Sumerian word refer to (Jar) , this synonymous in Akkadian as (*karpatu*) (Labat , MDA , p.141 ; CDA , p.149).

3 - i₃ : A Sumerian word refer to (Oil) , this synonymous in Akkadian as (*šamnu*) (Borger , AOAT , 2004 , p.303) .

4 - gu₄ : A Sumerian word refer to (Ox) , this synonymous in Akkadian as (*alpu*) (Labat , MDA , p.137).

5 - gan₂ : A Sumerian word refer to (field , land) , this synonymous in Akkadian as (*eqlu*) (Labat , MDA , p.87).

6 - apin : A Sumerian word refer to (plough) , this synonymous in Akkadian as (*epinnu*) (Labat , MDA , p.61).

Conclusion :

1- This texts in this research are came from the Iraqi Museum , and all of them are confiscated texts , and did not come through scientific excavation , therefore , it is difficult to determined its exact location of them , but through its study and analysis , its contents and the language of these texts , and the shapes of their signs , so it can be compared to the texts which published from the same period , make it possible to return these texts to their geographical location , which is located between the two cities (Umma and Lagash) , or within the vicinity of the city of Umma .

2- This texts are empty of historical date formula , which known in the rest of historical periods , but it was dated according to the system known to us (mu-iti) formula , this formula used before the Akkadian period , particularly in the Early Dynastic Periods (the Thirds A , B) , within the city Umma and Lagash , especially in the reign of the king (Lugalzagisi) , and the method of using this numbers was a reference to the years of the reign of that king , so must of the archive texts of (mu-iti) came from the temple of Inanna , in the city of Zabalam , all of them belong to the same king .

3- The texts which published here , have economic nature , it has provided us which important information on the nature of that ancient economy , especially in the Early Dynastic periods .

4- These texts illustrated the importance of minerals (or metal tools) in the lives of the inhabitants of ancient Mesopotamia , and its multiple uses such as the copper industry and converted in the form of pots or tools , as we see in these texts .

Notes :

¹ Jones , T.B. and Snyder , J.W. , Sumerian Economic Texts from the Third Ur Dynasty , SET , (USA : 1961) , p.420 ; Black , J. and others , A Concise Dictionary of Akkadian , CDA , (Wiesbaden:2000) , p. ; Gelb , I.J. , and Others , The Assyrian Dictionary of the Oriental Institute of the University of Chicago , CAD , E , (Chicago:1958) , p.321 .

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أدوات معدنية في نصوص مسمارية غير منشورة
من عصر فجر السلالات

الباحثة :
إسراء سعد صالح

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الملخص :

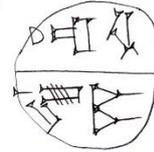
عرف سكان بلاد الرافدين معادن كثيرة وعرفوا طرائق تصنيعها واستعمالها ودخلت في الكثير من أعمالهم وصناعاتهم ، حتى في مجال انتاج الأعمال الفنية والأدوات والآلات الزراعية وأسلحتهم، ومن أهم هذه المعادن الذهب والفضة والنحاس والقصدير التي دخلت في عمل سبائك البرونز وغيرها ، وقد اجتهد سكان بلاد الرافدين القدماء في الحصول على خامات المعادن فكانوا يتحملون أعباء السفر والمتاعب في جلب الخامات من أماكن عديدة . وكان من بينها دلمون (البحرين) وماكان (عمان) وميلوفا ومصر وبلاد الأناضول .
الكلمات المفتاحية : بلاد الرافدين ، النحاس ، التجارة ، الأواني .

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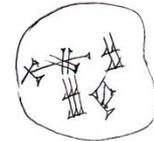


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Obv



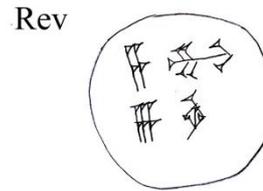
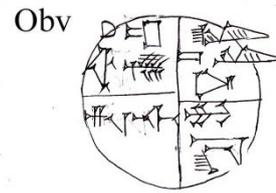
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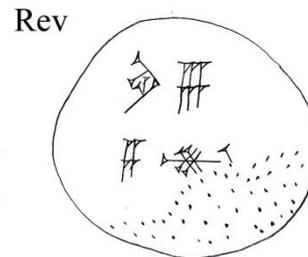
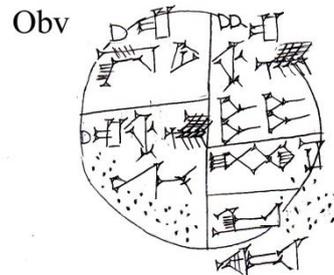
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No. 3
IM- 204587



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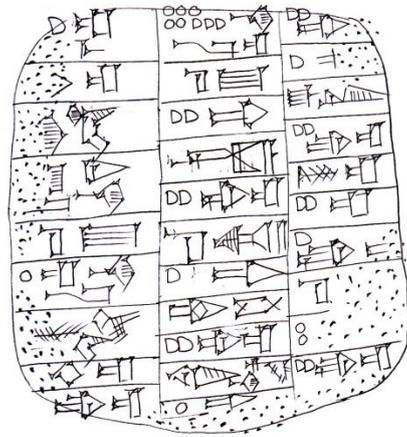
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Obv

5



Rev

