



Review Paper

Gender Archaeology; An Analytical Review of Gender Symbols in Proto-Elamite Anthropomorphic Nominal Chain of Signs

Donya Etemadifar*

Islamic Azad University, Science and Research Branch, Tehran, Iran

Masoud Ahmadi Afzadi

Islamic Azad University, Tehran North Branch, Tehran, Iran

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Abstract: Gender archaeology, the study of gender differences between men and women throughout history, is a significant subject that has evolved into a proper, prominent science in recent decades. Proto-Elamite is among the periods that give us great information regarding the status of genders. The abundance of tablets found from this period is among the oldest middle-eastern written scripts. Many of these are about paying wages to male and female laborers for manufacturing and stockbreeding jobs. Studying these texts provides essential information regarding the status of Iranian Plateau's women at the end of the fourth millennium B.C. M388 sign is one of the most significant gender signs known. It probably symbolizes a man or a particular social class in proto-Elamite texts. It's also been used before signs that might show names written using a phonetical structure. M124 is the opposite sign. It was probably considered a female gender sign. It has been used in some tablets or at the beginning of a series of phonetic signs (names). This research attempts to reconstruct two different signs at the beginning of the name sign-series. These signs probably assign gender to the names. Authors read 1500 tablets in Susa. Two hundred ninety-five of these tablets begin with M124 or M388 signs. There are more than 100 phonetic signs. The chances of 295 names being similar are slim. This strengthens our gender-specification hypotheses that M124 and M388 are gender symbols in the name sign-series.

Keywords: *Proto-Elamite, Gender, Syllabic Structure, Tablets of Susa.*

* Corresponding Author

Email Address: Etemadi.d@yahoo.com (Donya EtemadiFar)

Introduction

The proto-Elamite period had a writing system, seal-making art, and other evidence pointing to a complex management system of non-Mesopotamian origin (Pittman, 1997, p. 135). Each piece of evidence has its special merit in understanding this historical period. Tablets are a large part of this evidence. The relatively large number of found texts from this period convey accurate and reliable information regarding the period's society, social classes, and usable products. Studying these texts indicates they do not use the same language as the pre-Sumerian tablets in southern Mesopotamia. However, many of the numerical signs used in the tablets seem to have been adopted from the Mesopotamian writing system (Damerow and Englund, 1989).

Tablets, the most complex protohistoric management tools, are chronologically newer than the other management hand tools. The emergence of such tools meant the appearance of the most difficult administrative tools that remained unchanged in form till the historic and contemporary era. According to John Alden (1982: 613), this cultural phenomenon is forged all over Iran in 3300-2800 B.C. Nevertheless, due to the scarcity of C14 dating and year-finding, just a few samples of proto-Elamite oldest scripts are found in Susa, Acropolis I, layer 16 (Le Burn, 1978: 190; Voight & Dyson, 2003: 39) and in Tall-e Malyan's TUV trench (3350-3300 B.C.) (Dahl et al., 2013: 358).

Studying the proto-Elamite period economy makes it clear that household production was the base of that society, and men, women, and children worked together (Yousefi Zoshk, 2009). Participation of women in producing non-homemade products in this society is considered progress in such complex societies (Yousefi Zoshk et al., 2019). Skilled laborers with specific economic activities were assigned to manufacture handicrafts instead of household members. This made these societies economically complex (ibid). Various proto-Elamite tablets' texts are about paying wages to the laborers. This indicates that women, and in a few cases children, worked shoulder to shoulder with men in manufacturing jobs. Women received wages for their activities. Proto-Elamite managers probably used human resources management, though we are primarily in the dark regarding their specific duties and workforce organization (Dahl et al., 2018: 18).

Research Goals and Necessity

This research aims to test gender in the name sign-series of proto-Elamite scripts found in Susa. We study the signs at the names' beginning. Similar signs have been found in southwest Iran's late third-millennium cuneiform tablets. Research questions and hypothesis:

- 1- How can we study gender distinctions in the proto-Elamite script?
- 2- What do gender signs written phonetically at the beginning of the name sign-series

look like in the proto-Elamite script?

Hypothesis

- 1- Increasing complexities of the proto-Elamite period gave rise to a gender system among the laborers.
- 2- Ration given to the laborers was directly related to their gender. This strengthens the hypothesis that both name and gender are recorded in the texts.
- 3- Of 1500 tablets studied in Susa, 295 begin with M124 and M388 signs that form a name sign-series. If these series are dissimilar or a little similar, it strengthens our hypothesis that M124 and M388 are gender symbols in the name series in proto-Elamite texts.

Methodology

Our research methodology is theoretical. We gathered information through library research.

Research background

De Morgan excavated the first proto-Elamite texts in Susa in 1899. Vincent Scheil, the scriptologist of the French excavation committee, published Susa excavations results a year later. Further along in the twentieth century, nearly 1450 discovered proto-Elamite tablets were published. Some researchers tried to find a writing-system relation between proto-Elamite script and texts written in the Babylonian script (Nissen et al., 1993: 77-104). These include Damerow and Englund's book (Damerow & Englund, 1989; Englund, 2004) and Jacob Dahl (Dahl, 2005). They tried to identify and structure proto-Elamite script by graphical analysis of proto-Elamite texts and their similarity to the proto-cuneiform writing system, which emerged in 3300 B.C. in the Uruk period (Englund, 1998: 18). They had some success. For instance, Jacob Dahl did an initial deciphering of proto-Elamite texts, which included sheep and goat herds, the size of the pack, the existence of males, females, and offspring in the livestock, the relation between the adult females and the milk produced in the herd. Comparing its accounting with the Mesopotamian one is another of his deciphering (Dahl, 2005). Only a tiny part of the proto-Elamite script is recognized. Phonetic signs are probably one of the essential parts of this script. Scheil (1923) first guessed it. William Brice (1964: 34) and Meriggi (1971: 173-174) studied a set of name signs-series. Françoise Desset (2012: 53-62) studied similar name-signs and their syllables using tablets from Susa. Hawkins (2015: 4) mentioned that proto-Elamite scripts are phonetical. By comparing the studies, Dahl and his students (Dahl et al., 2018) concluded that proto-Elamite texts include workforce and sometimes the name of the group and managers and also have a phonetical structure.

Columbia university researchers (Born et al., 2019) analyzed phonetic signs in 2019. None of these researches succeeded much. They even did not provide solid reasons to prove

the phonetical nature of Proto-Elamite script. Afshari (2019) studied and coded phonetic signs in his thesis, focusing on complex name ideograms in proto-Elamite script around the summer of 2018. After comparing the statistical description of the proto-Elamite script's phonetic signs with the names found in Susa in the late third and early second millennium B.C., he found identical similarities. This means they are both written based on the same phonetic structure. This is the only research showing exact statistical similarity between a proto-Elamite script and a phonetic script. This strengthens the hypothesis that they both follow the same phonetical structure. Many questions regarding logogram signs and the proto-Elamite script's numerical system remain unanswered. Hopefully, we can have answers in the future using a scientific, precise approach (Etemadifar, 2018).

Proto-Elamite scripts

There are many uncertainties regarding the genesis of the proto-Elamite writing system. It probably began in Mesopotamia circa 3300 B.C., independent of the administration system developments and the emergence of writing, and ended circa 3000 B.C. (Englund 2004). Proto-Elamite tablets are the oldest complex written documents in Iran Plateau that contain both numerical system and logogram symbols. Damerow (1999) believes some of its writing system signs and associated numerical system signs are taken from a Mesopotamian writing system or, more accurately, have a common ancestor. They use this written system mainly for administrative purposes (scheil, 1905: 60). Apart from a few cases resembling the proto_cunieforn writing system (Sal and Kur), this written system doesn't include pictures of the human or human body (Dahl et al., 2018).

Proto-Elamite texts can be divided into three structural units according to their writing style: title, entry, and total (Englund, 2004a). According to Dahl's theory (Dahl et al., 2018), proto-Elamite tablets consist of 5 structural sections: 1- Title, 2- Registry entry, 3- Total, 4- Upper-edge Text, 5- Subtotal (Dahl, 2018: 388). The title is a row of non-numeric and logogram signs, followed by registry entry and numeric signs (Yousefi Zoshk, 2011). Each proto-Elamite tablet consists of several text parts. Most tablets begin with a symbol that is a symbol of the whole text. It can signify an individual, a house, or a company (Damerow and Englund, 1989: 13).

The title is written on the front of the tablet. Proto-Elamite numeric and logogram symbols are written in lines up to down and in defined columns (Yousefi Zoshk, 2011). In the proto-Elamite text, the non-numeric part begins from the registry entry after the initial sign. It often consists of a series of ideograms or non-numeric signs (Englund, 2004). These are probably common professions or titles used by companies and houses. Based on the sign-series that are probably a name, we can guess these structures are syllabic and specify a person of some authority (Hawkins, 2015).

The total sum is written behind the tablet in most proto-Elamite texts containing accounting entries. General features of the proto-Elamite tablets are: First, proto-Elamite documents are written in lines. Second, the beginning signs on a tablet are called title, functionally almost the same as the sign. Proto-Elamite signs are never numeric signs. Third, each entry usually consists of one or several ideograms after the numeric signs (Hawkins, 2015, p. 3).

Proto-Elamite scribes used both sides of the tablet. No matter how much space was left on the tablet, the scribe would do a yaw rotation and record the total sum on the back of the tablet (Englund, 2004a). When more space was needed for separate accounting entries, the scribe would write those entries by reverse yaw of the tablet and continue writing in the back. He would then record the total by returning to the front of the tablet and reversing it horizontally (Yousefi Zoshk 2011). However, the essential feat of this management system was using various signs. Most proto-Elamite signs fall within four categories: 1- Numerical, 2- Ideograms, 3- Ownership, and 4- Phonetic signs (Dahl, 2018, p. 390).

1. Numeric signs

These are the simplest signs in proto-Elamite texts. As the name implies, they are part of the writing system, and except in the base ten numeric system, the rest of the signs are the same as the proto-cuneiform signs (Yousefi Zoshk, 1399: 29).

2. Objects signs

They are either single or combined. Single signs are usually followed by numeric signs. In combined signs, the signs can be made plural and indicate quality, an animal, or objects (Dahl et al., 2013: 366). Object signs have been in three forms: vegetables and vegetarian products, including grains and agricultural products, animals and livestock products, and signs that symbolize humans. Signs signifying humans might have been used to show rank, gender, and social status. An example is the laborer signs. Desset (2016: 75) believes to have identified 7 of them.

3. Ownership signs

Ownership signs can be the header or title that introduces the entry. They can consist of several different signs. This sign always precedes the name in the main entry. The owner's sign can also be put on the back of the tablet and in the administrative sum section.

4. Phonetic signs

This group is used to register names along with some signs and the phonetical structure. According to the proto-Elamite tablets studied and published, there are probably 166 phonetic signs. One hundred are in the proto-Elamite script, and the rest are variants. Also, in studies on 1500 proto-Elamite tablets, 520 tablets contained name sign-series. One thousand one hundred fifty name sign-series found in these tablets. All of them

conform to the signs.

Most found tablets containing phonetic series are found in Susa excavations. Unfortunately, there has been no stratigraphy, and during a 300-year timespan, many generations used this script. Now, we are unable to separate them. They may differ in writing or even in sound. There have been different accounts and complex reports of humans in proto-Elamite texts. There is one very complex case. Englund suggests it is recorded names of a particular person. In most cases, only the names of the supervisors are registered. M124 and M388 signs specify those names. Although they are recorded as signs, they are categorized as laborers (Dahl et al., 2018: 18).

Studying Gender in Proto-Elamite Texts

Gender limitations are usually different for women and men. Some archaeologists emphasize that gender is an element of personal identity. They study the way gender affects a person and how it changes him or her in a specific culture (Nelson, 2005: 98).

While it might be expected that significant socio-political work is done out of home due to gender prejudices, most of the technical productions in proto-Elamite society was performed domestically. Domestic work, in general, and producing animal byproducts in particular, can be gender-specific. Also, work duties may be divided between the workforce. Non-governmental workshops do not just show social and economic complexities. The household is a source of complex social relations. This can include ideological and financial control by the elite and producing ordinary or complex things. Gender-based task assignment within the household indicates complex social, economic, and political agreements. As a food and handicraft source, the family paves the way for the participation of men, women, and children in the political economy. We argue that to understand the traditional meaning of gender-based task assignments, we must determine the meaning of gender-specific work or specialty in proto-Elamite societies. We must think beyond conventional concepts of gender-based division of labor or workforce and industrial workshop-based manufacturing. To give domestic production its due place, we need to provide a new reinterpretation of laborer-related texts and ration to highlight many gender-specific household activities. Concepts such as gender-based job separation between family members while producing a specific product extend our understanding of the issue. Accounting data in tablet writings can provide the initial information to study gender-based division of labor, though they can obfuscate determining the number of producers. Domestic work has been the primary source of specialized jobs in all cases. It must be the central part of the analysis (Yousefi Zoshk et al., 2019).

Gender studies in Mesopotamian texts confirm that women and weaving are related. It is assumed that special duties have permanently been assigned to a specific gender. For



example, the plowing tool's heaviness was always given to men (Dahl et al., 2018: 17-18). Similar jobs done using hand tools are given to the women (Sherratt, 1981: 297). There are many similarities between proto-cuneiform and proto-Elamite texts, and proto-cuneiform texts are used as keys to deciphering proto-Elamite ciphers. However, remember that these texts also differ significantly, especially in the accounting method. For example, the daily rationing of laborers is not present in Mesopotamian texts. These texts talk about the gender of women, men, and children but never about their rations (Dahl et al., 2018: 18).

This is a significant difference between this human gathering in proto-cuneiform and proto-Elamite texts (Englund, 2009: 12). In several texts found in Susa (in particular, MDP, 6: 390; MDP 17: 112; MDP, 17: 193; MDP, 17: 340; MDP, 26: 218; MDP, 26: 472; MDP, 26S: 5040; MDP, 26S: 5218 and SE, 124, and MDP, 26S: 5218) a sequence of seven signs is recorded. There are probably signs symbolizing humans, each representing an official and/or honorable class of the society. Signs such as M370b + M388 or M370b + M72 are used to record children. They are rarely used in proto-Elamite texts, which gives them little importance. Signs M388 () and M124 () are most probably used for exceptional human cases. By comparing it with the original cuneiform sign KUR, we can say M388 is probably for men referring to a group of low-ranking laborers who are completed on the same hypothetical succession of signs (Desset, 2012: 75).

Studying the M388 Sign

Checking proto-cuneiform texts show an obvious graphical resemblance between KUR, SAL, and ERIM (ZATU 143) and proto-Elamite signs M388, M72, and M54. See (Damerow/Englund 1989: f.n.76).

In addition to the visual resemblance, they seem to be used similarly. For example, MSVO,1,212 proto-cuneiform text has symbols SAL, ERIM, and KUR A inside the text, which can be interpreted as a man, a woman, or a pair of them (Dahl et al., 2018: 5).

Signs determined to be a symbol of a laborer class, along with the combinations of these signs, seem to show a complex system of labor division and specialized task assignment. In many texts, proto-Elamite scribes did not take lower-rank enslaved people into account but recorded other people's roles while categorizing them. Our best guess about this group is that they were enslaved people doing forced labor (Dahl et al. 2018: 18).

M388 can be short for a man of a particular social class (Damerow & Englund, 1989: 29 and 57. f.n.157). It is sometimes used before all the signs. The sign might show names and is sometimes considered an anonymous labor class. In other cases, it refers explicitly to gender. M388 relates directly to the gender in combinations M370b+M388 and M370+M388+M370. M72 and SAL sign, its counterpart in proto-cuneiform script, are

the same. However, this is not the case for M388 and KURa. M388 is upside-down compared to KURa, its proto-cuneiform counterpart. KURb in proto-cuneiform texts is like proto-Elamite M388 sign seen in Uruk III period (ca. 3200-3000 B.C.) and rarely in Uruk IV period (ca. 3350-3200 B.C.) that is said to coincide with a proto-Elamite period. See (Englund, 2004: 125) and (Dahl, 2013: 242-243).

In proto-Elamite texts, a separate M388 means male gender. Signs from M381 to M385 refer to the family head or an institute. Despite the similar use of children-related signs, M370, etc., in the texts and their evident resemblance to their counterpart signs in Mesopotamian texts, M388 and KURa signs and their counterpart M72 sign are applied differently. While M388 and M72 can be used alone or with other signs, M388 is often used at the beginning, and M72 is often used at the end of the series. This shows M388 sign at the beginning of the series could be an indicator in that series, like M124. It could also be similar to signs for laborer classes and not related to gender. M388 sign's most common place is usually after the title and family head (Dahl et al., 2018: 11-12). M388 could also have a numeral meaning of tens to hundreds of commoners or be combined with other laborer-related signs such as M203. In some texts (e.g., MDP 6: 350 – MDP 6: 387), there are two M388 signs which seem to play a complex role. In such cases, it has two roles, e.g., It is a name, and the other role is one of the applications of this sign mentioned above (Dahl et al., 2018: 12).

Studying the M124 Sign

Proposed Meaning: A class of Laborers, Primarily Agents

M124 sign, along with M288 (grain container, specifying the capacity), M388, and M218 (probably the sign of the grain or product), is the fourth common sign in proto-Elamite texts (Dahl et al., 2018: 17). M124 and M388 have been used frequently to specify those in charge of rationing texts (ibid). As the M388 sign, this sign has been used in different orders at the beginning of the probably phonetic name sign-series. Authors believe this sign gives a gender role to the name sign-series and is very similar to the SAL sign in the old Elamite script. Englund (2004, Fig. 5.14) has already determined the equivalent of SAL signs in the proto-Elamite script by comparing it with a proto-cuneiform sample. This is probably acceptable. Studies have shown that M72 equals SAL. However, different signs have been used in the proto-Elamite script for living beings, such as livestock, and only two signs, M388 and M124, have been used at the beginning of the name sign-series. The frequency of the M124 sign is about a quarter of the male sign. It is somehow understood that this sign is used for the female gender.

Discussion

Studying gender signs in old Elamite script: The oldest Elamite texts found are in Akka-

dian script from the end of the Awan dynasty (Grillot 2013: 197). Others, like Potts (1388: 189), believe that the Elamite script borrows from the Akkadian one due to Susa's occupation by Akkadians. Nowadays, we can not say that the borrowing from Mesopotamian script involved using force or that the native population welcomed it and looked up to the conquerors (Frankfort, 1955: 33).

We know that Elamite cuneiform script probably was formed on Iranian soil in the 23rd century B.C. This script was affected by the Mesopotamian script and was common in that land till the 4th century B.C. It has been evolving all that time (Grillot, 1987: 9). This script was written from left to right and up to down like the Akkadian cuneiform (Stopler, 2004: 69).

According to Hinz (2008: 47), Elamites changed what they borrowed from Mesopotamians. Akkadian script needed to be as syllabic as possible. The Elamite scribes purged all logograms and other unclear dead weight; the very Urukian heritage Mesopotamian scribes were shouldering respectfully. The realism of Susian scribes, a hallmark of the Elamite spirit, motivated them to make the most of the cuneiform script's capabilities. They simplified the script, taking it to the threshold of an alphabetic script (Hinz, 2008, 47).

Based on the authors' studies, the old Elamite script had nearly 260 syllables and 115 cuneiform signs (Afshari, 2019: annex 5).

Some old Elamite script signs come before the name, like the derivational suffixes. Stopler (2004: 66) calls them name's status agents. What follows them could be Divine name, personal names, female personal names, or words describing females (Stopler, 2004: 66). Examples are the DINGIR sign, written before a holy name, or GIŠ and BAD/BE signs coming before objects and human names. In some cases, a sign such as MEŠ, written after a name, would mean that the previous sign is a logogram (Grillot, 1987: 9). It also endows a plural meaning to the previous logogram. For example, MEŠ, written after the name of a country, means 'countries' (Stopler, 2004: 66-67). Sometimes two signs were written before names, which showed both male and female genders for the name followed. One of them was LÚ, pronounced 'ruh,' which means 'male' or 'Mr.' today (Grillot, 1987: 13; Steve, 1992: 54). The SAL sign was used for female names (Steve, 1992: 17).

Methodology

Using the above explanations and considering the M388 sign as a male sign and the M124 sign as a female sign, the authors, read about 1500 Susian tablets in the following collections: MDP.6, MDP.17, MDP26, MDP26S, MDP,31, DAFI.1971, de Mecquenem 1956, (Stolper 1978; Dahl 2019). From nearly a thousand name sign-series, 295 began with M124 or M388 signs and formed a name sign-series. Fifty-nine started with M124, and 236 began with the M388 sign. There was no common name between these two signs. This nearly proves our hypothesis that M388 and M124 signs bring gender to the name sign-series.

As linear Elamite script is a native script of the Iranian Plateau in the third millennium B.C., it might be the best script to compare with the proto-Elamite samples. However, it is still undergoing incomplete deciphering (Desset, 2018) and can't be used for comparison with the proto-Elamite script. Our best-case scenario is comparing the Elamite script with Susa's cuneiform scripts, which belong to the third and late second millennium B.C.

To prove the syllabic use of name signs in the proto-Elamite script, we used the phonetic names in the third millennium and early second millennium B.C. cuneiform scripts found in Susa. Most of these tablets are discovered in Khuzestan and Susa regions. It's assumed that people of that region haven't been through significant cultural and lingual developments in the last few hundred years.

To study the frequency of shared names, e.g., names repeated at different times for different people, we compared 500 cuneiform names found in Susa available in collections (Scheil, 1900), MDP. 2 (Scheil, 1905), MDP. 6 (Scheil, 1911), MDP. 11 (Scheil, 1914), MDP. 14 and König's book of "*Die elamischen Königsinschriften*" and Malbran-Labat's book "*Les inscriptions royales de Suse*". These old Elamite human names were extracted, sorted by the name of the containing tablet (without purposeful selection), and their list was published before (Afshari, 2019, appendix 4). The authors did not find any identical pair of names for commoners in studying 500 old Elamite names. Texts from Susa, written in Susian cuneiform script, were written in the late third and early second millennium with more than 200 syllables. Steve (1992) published a list of them. This is natural to have a diverse selection of names, which makes finding two identical names very unlikely.

The proto-Elamite texts also used different genders for livestock (2005, 9). The proto-Elamite macro-management has become so complex and highly precise that it used a wealth of various signs for different ages of a female goat (Dahl, 2005: Fig. 8). Almost half of the found proto-Elamite texts are about paying employees' wages in manufacturing and livestock jobs. Based on this and the calculations recorded in the tablets, we know them to be highly precise and error-free in paying wages (Desset, 2016: 80-82). This makes creating gender-specifying signs natural in Proto-Elamite society. By studying the late third-millennium cuneiform texts found in southeast Iran, we know that some of the signs used at the beginning of the human names, such as old Elamite LÚ and SAL signs before male and female names, showed the gender and social status of the owner. Through the phonetic study by Afshari (2019), we know phonetic names in the cuneiform script have almost identical to the probably phonetic signs of the Susa. Authors believe it's safe to say M388 and M124 are gender-separating signs in the proto-Elamite name sign-series.

Conclusion

Many people have tried to prove that the proto-Elamite script is phonetic. There have



been lots of worthy progress in this regard. Nowadays, there is no doubt about the phonetic nature of the script. Hypotheses are now more about further deciphering it.

Similarly, the authors tried to test their gender-specification hypothesis in the Proto-Elamite texts by studying name sign-series in proto-Elamite texts and comparing them with proto-cuneiform instances from Susa. In many papers, M388 and M124 signs are described as meaning male and female gender, respectively. We studied the subject by examining 1500 tablets and 295 name sign-series. Fifty-nine and two hundred ninety-five of these name sign-series were prefixed by M124 and M388 signs, respectively.

First, we compared the name sign-series belonging to the two different groups of signs. No two names were identical between the two groups, which strengthens our hypotheses that they are gender-specifying signs in names. Second, to further prove it using more solid reasons, we studied the cuneiform texts found in Susa from the 2200-1500 B.C. period. This led to the same result. We found no identical names between the two signs of interest. Our arguments can mean that in the proto-Elamite period, names, besides being syllabic, were 'gendered,' and male and female genders were mentioned separately in the text. This can be thought of as significant progress in proto-Elamite society.

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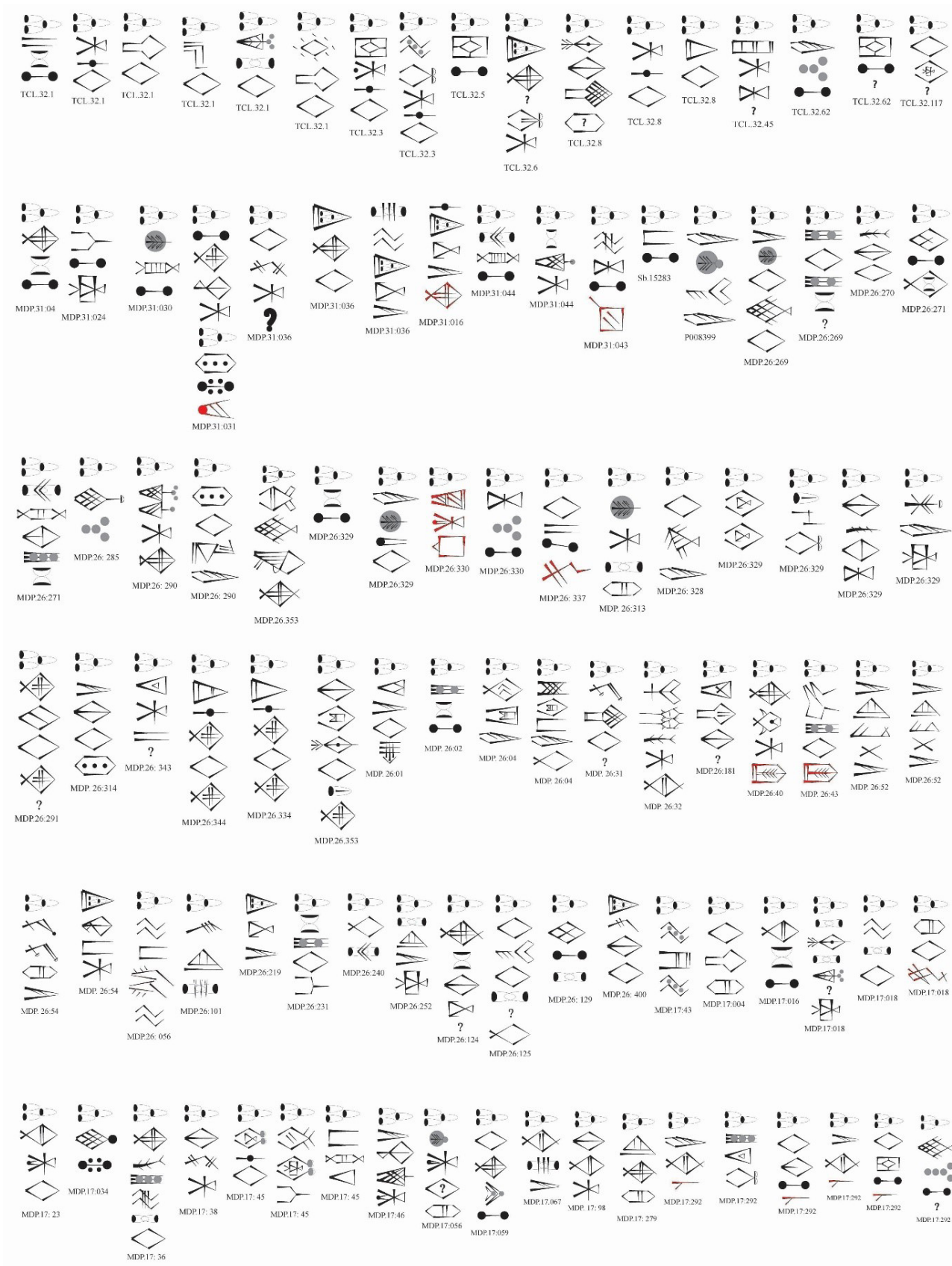


Fig 1: list of nominal signs begins with the M388 (Afshari 2021).

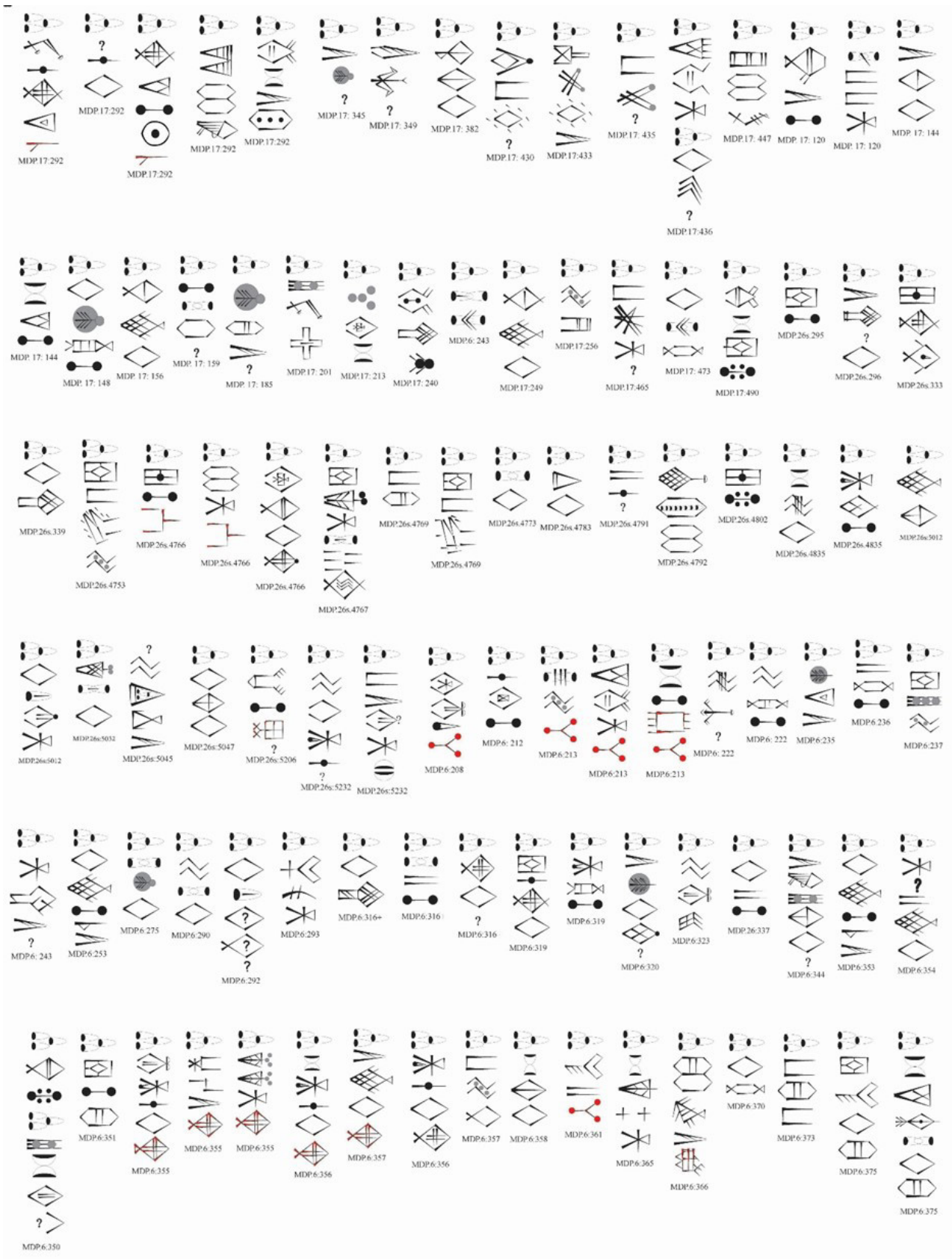


Fig 2: list of nominal signs, begins with M388 (Afshari 2021).

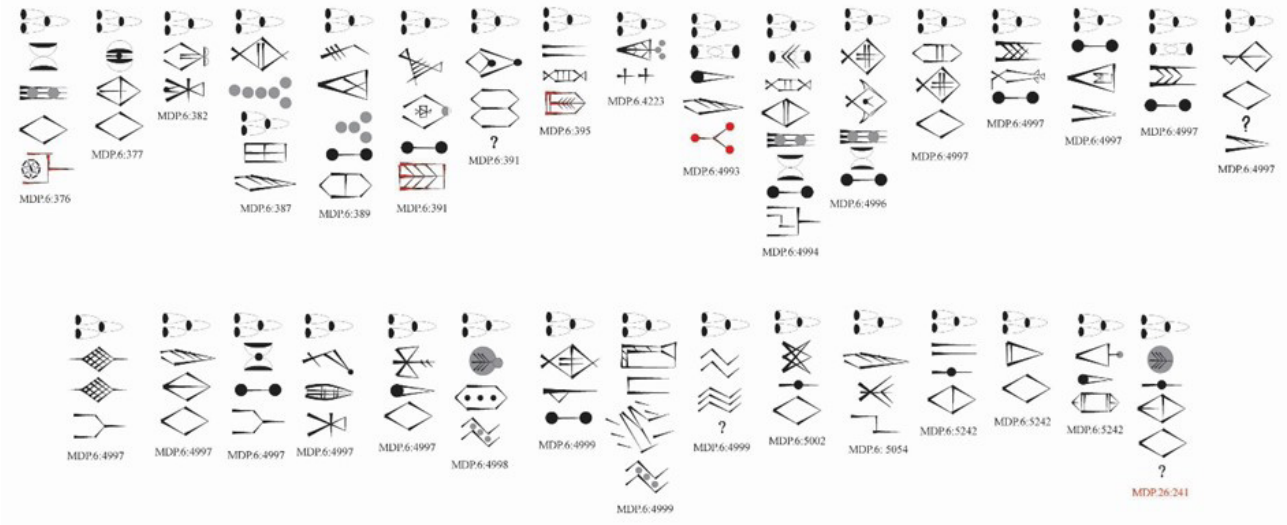


Fig3: list of nominal signs, begins with the M388 (Afshari 2021).

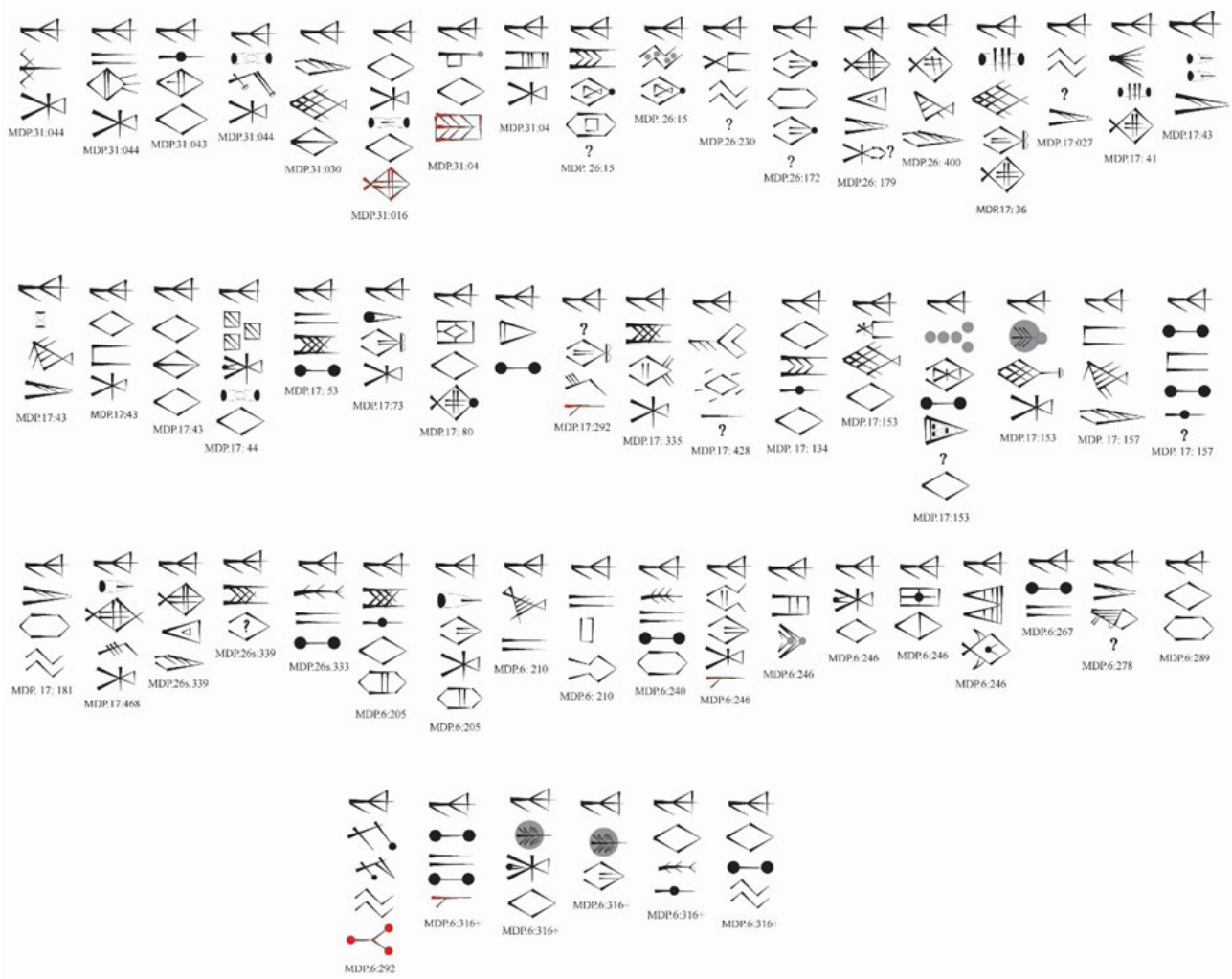


Fig4: List of nominal signs, begins with M124 (Afshari 2021).

