



Considerations on the History of Writing on the Iranian Plateau (ca. 3500-1850 B.C.)

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Abstract: The Iranian Plateau is, in the late 4th millennium B.C., with Mesopotamia and Egypt the birthplace of writing in the World. We propose here to consider the Proto-Elamite (Early Proto-Iranian) and Linear Elamite (Late Proto-Iranian) scripts, not as two different writing systems, but as the same system at two different chronological stages of evolution. Between 3500 and 1850 B.C., the continuous history of writing in Iran may be consequently understood according to 6 distinct phases (I: 3500-3300 B.C.; II: 3300-3000/2900 B.C.; III: 3000/2900-2300 B.C.; IV: 2300-2000 B.C.; V: 2000-1850 B.C.; VI: after 1850 B.C.).

Keywords: Iran, Bronze Age, Proto-Elamite writing, Linear Elamite writing, writing system, Hatamti.

Introduction

In accordance with an endogenous documentation for the Iranian plateau, it is proposed here to dismiss the use of the Mesopotamian toponymical notion of *Elam* when referring to the Iranian plateau from the point of view of its own inhabitants (Desset 2017). In using *Elam* as a label, one is no closer to the emic conceptions of the inhabitants of the area in question than in applying a modern term such as Iranian plateau¹, but even farther since this term misleads us inasmuch as we are given to think that it might reflect a specific historical value for the people who lived there which, actually, was not the case. On the contrary, the still enigmatic notion of *Hatamti*, attested at least since Puzur-Sušinak's time in the 22nd century B.C., could play the role of a specific cultural,

1. From a strict geographic point of view, the Early Proto-Iranian (Proto-Elamite) and Late Proto-Iranian (Linear Elamite) texts currently known were found in a part of the Earth surface incidentally called Iran nowadays. This modification of the terminology is similar to the switch from the linguistically charged "Luwian hieroglyphs" to the linguistically neutral (and purely geographic) "Anatolian hieroglyphs" (Yakubovich 2010, 2015: p. 203). The label Proto-Iranian writing should be in no case considered as or used in igniting nationalism as our mission, as scholars, is exactly the opposite.

ethnic, and historic referent. For these reasons, and with due respect for all the scholars who were and are involved in this field, a new terminology is proposed to enable us to study the history of this specific part of the Ancient Near East with less misleading, less biased, and better-adapted tools:

<i>Former terminology</i>		<i>Proposed terminology</i>
- Proto-Elamite writing	>	Early Proto-Iranian writing (ca. 3300-3000/2900 B.C.)
	>	Middle Proto-Iranian writing (ca. 3000/2900-2300 B.C.)
- Linear Elamite writing	>	Late Proto-Iranian writing (ca. 2300-1850 B.C.)
- Elamite language	>	Hatamtite language

The recent decipherment of the Late Proto-Iranian writing (Desset et al. 2022; forthcoming) has important implications for the history of writing in the Ancient Near East. We propose here that the Early Proto-Iranian (Proto-Elamite) and Late Proto-Iranian (Linear Elamite) scripts were probably not two different writing systems, but the same writing system at two different chronological stages of evolution², with a still poorly documented stage in between (Middle Proto-Iranian writing). This genetic link and the consequent continuous tradition of writing in Iran between 3300 and 1850 B.C. could allow us to proceed in a regressive way from the deciphered Late Proto-Iranian signs back to their Early Proto-Iranian graphic counterparts when possibly used with a phonetic value (in anthroponomical sequences) and consequently to deal finally with the anthroponomical sequences recorded in late 4th millennium B.C. Early Proto-Iranian tablets.

Between 3500 and 1850 B.C., the history of writing in Iran may be understood according to 6 distinct phases (I: 3500-3300 B.C.; II: 3300-3000/2900 B.C.; III: 3000/2900-2300 B.C.; IV: 2300-2000 B.C.; V: 2000-1850 B.C.; VI: after 1850 B.C.). As this revised historical sketch is based on the documents currently known, it is more than likely that surprises and modifications are to be expected in the future (Figs. 1 and 2).

A) 3500-3300 B.C.; Phase I: numerical and numero-logographic tablets

Around 3500 B.C., following envelopes and tokens, numerical and numero-logographic tablets are attested from Syria to the Central Iranian Plateau, using some very rare logogrammatic object value signs (maybe related to complex tokens) and numerical value signs functioning according to 3 distinct numerical systems: the sexagesimal and bisexagesimal accounting systems for discrete objects and the capacity system for continuous objects (Desset 2016: fig. 27). It is to be noted that envelopes and tokens will be maintained even after the apparition of writing properly speaking (see phase II) as an independent practice³.

2. As previously proposed by Gelb (1963, p. 89: Linear Elamite as a “developed form” of Proto-Elamite), Reiner (1969, p. 56: “a more developed form of this writing”), Meriggi (1971, p. 184: “derivate da quella delle tavolette di contabilità”), Steve (2000: p. 75-78), and Grillot (2008: p. 9). For an opposite point of view, see Englund 2004: p. 143-144.

3. On this phase, see Glassner, forthcoming.



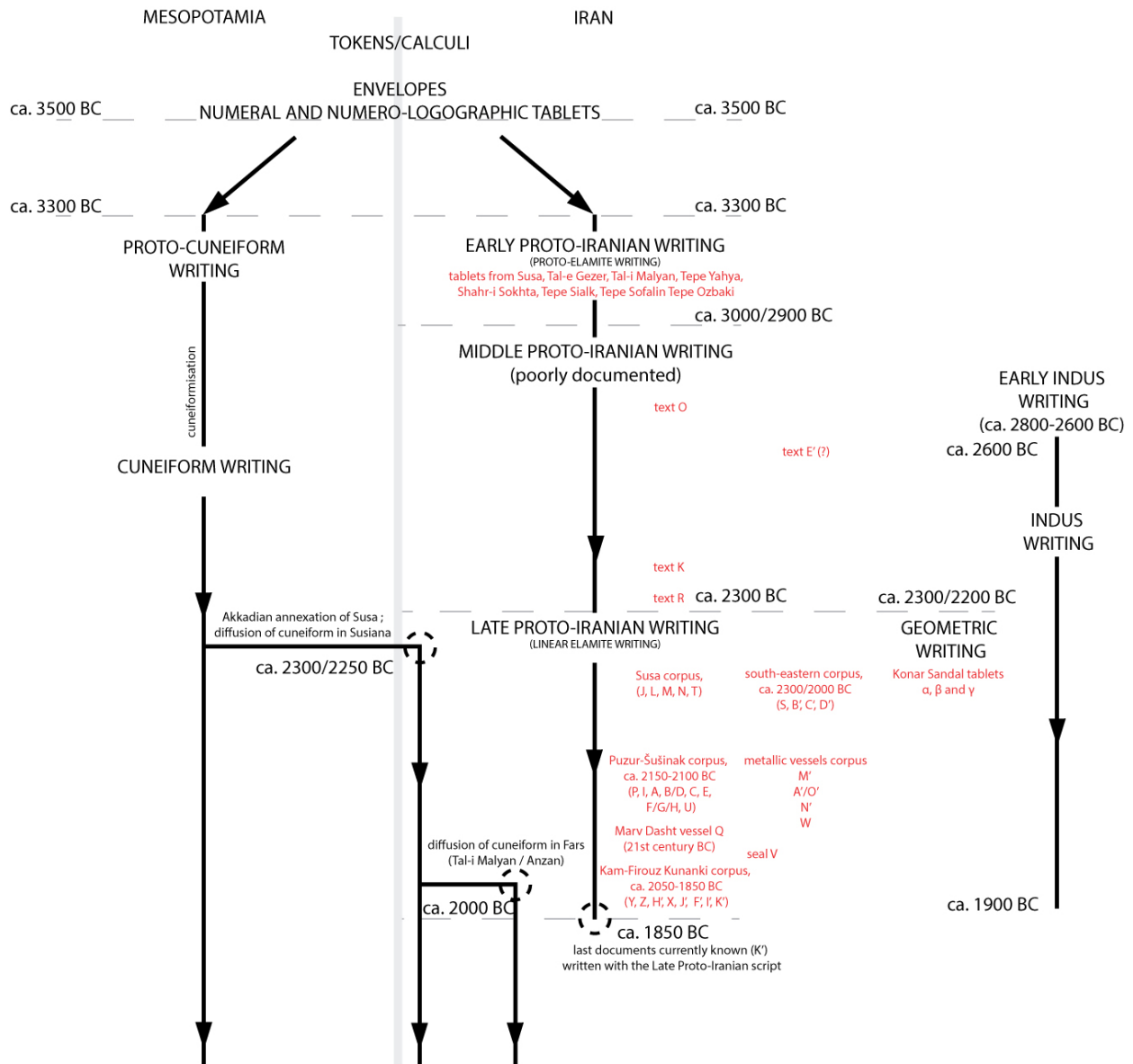


Fig. 1: History of writing on the Iranian Plateau (ca. 3300-1850 B.C.) 1

B) 3300-3000/2900 B.C.; Phase II: Early Proto-Iranian writing (Proto-Elamite tablets)⁴

Around 3300 B.C., *at the same time* in the Iranian Plateau and in Southern Mesopotamia (as well as in Egypt), two sister-scripts, the Early Proto-Iranian and Mesopotamian Proto-Cuneiform systems, were developed⁵. They shared a few common inherited features from phase I (numerical value signs, the 3 previous numerical systems, and some rare logogrammatic object value signs) but otherwise diverged completely. This exceptional explosion in creativity laid the basis of the writing system used in Iran until the

4. See Desset 2012: pp. 1-91 and 2016.

5. On this question, see Desset 2012: pp. 63-81 and 2016: pp. 88-96. With the current dating methods and the plateau in the calibration curve in the late 4th millennium B.C., it is very probably impossible to distinguish when and where writing was first developed as its diffusion (or the diffusion of the idea of writing) probably occurred very quickly after its invention, maybe just in one generation (20/25 years).

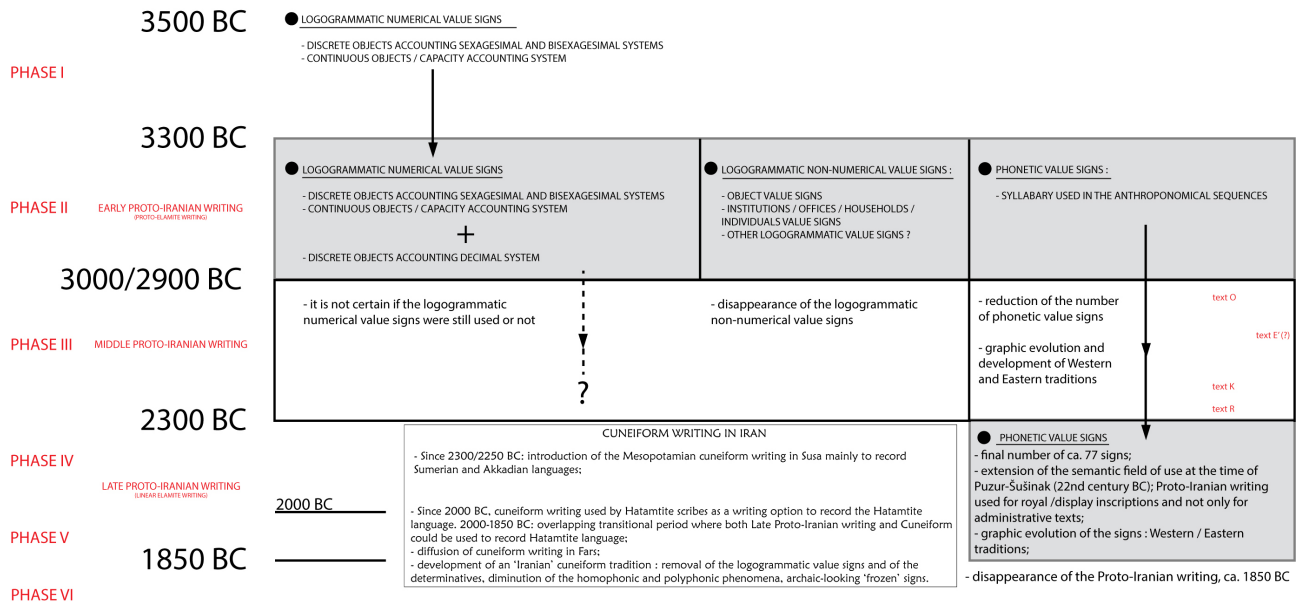


Fig. 2: History of writing on the Iranian Plateau (ca. 3300-1850 B.C.) 2

beginning of the 2nd millennium B.C. with the creation of a complete set of ca. 1500 logogrammatic and phonetic-value, generally abstract-looking, signs, while a new numerical system was developed for counting discrete objects: the decimal system. During the few centuries of use of the Early Proto-Iranian tablets, between 3300 and 3000/2900 B.C., a graphic evolution can be determined for some of the signs (Desset 2016: pp. 93-95), starting a process that would continue during the whole history of the Proto-Iranian writing until the beginning of the 2nd millennium B.C.

Approximately 250 to 300 nuclear signs were specifically used to record the names of the persons involved in the book-keeping tablets⁶, probably including an important proportion of phonetic (syllabic) value signs which, after a 'sieving' process in the Middle Proto-Iranian writing phase, would constitute the signary pool source of the Late Proto-Iranian signs.

Here is not the place to deal with the reading of the Early Proto-Iranian anthroponomical sequences based on the deciphered Late Proto-Iranian signs, as this will be the topic of another study. It can be preliminarily observed, however, that the vocalic signs M218: *a*, M96: *e*, M66: *i*, M371: *u*₂ (/u/), and M57/M57a: *u* (/o/) are more than overrepresented at the end of the Early Proto-Iranian anthroponomical sequences⁷, perhaps to stress a vocalic sound (long vowel; vocalic complement). In this perspective⁸:

6. On the Early Proto-Iranian anthroponomical signs sequences, see Desset 2012: pp. 46-62 and 2016: pp. 82-87.

7. In this connection, it is worth mentioning that Meriggi (1971: pp. 173-174), even though he could not determine the vocalic nature of these 5 signs, noticed that they were very frequently used in the anthroponomical notations in the Early Proto-Iranian tablets (they are among the 6 most frequent signs attested in writings of proper nouns) and that, for this reason, were probably phonographic.

8. On this topic, see Kervran 2019.

- M218: *a* is very frequently preceded by M4: *la*, M219: *ta*, M259/M263: *ha*, M223b: *ra*, M377/M377e: *ša*, and M387: *na*;

- M371: *u*₂ (/u/) is frequently preceded by M347: *pu*, M9: *zu* and M226ca: *tu*;

C) 3000/2900-2300 B.C.; Phase III: Middle Proto-Iranian writing (transition phase)

Around 3000/2900 B.C., the Early Proto-Iranian administrative/book-keeping tablets were seemingly, and for an unknown reason, not inscribed any more. From a documentary point of view, Middle Proto-Iranian writing phase is very poorly illustrated and for now only 4 documents may be tentatively attributed to this chronological stage:

- O⁹; found in the Donjon of Susa, O displays both Early Proto-Iranian and Late Proto-Iranian signs;

- E¹⁰; found in the architectural complex topping Konar Sandal south mound, this document remains quite problematic and comparisons with Early Proto-Iranian and Late Proto-Iranian script phases are still elusive;

- K and R documents from Acropolis of Susa present many Late Proto-Iranian signs while a few signs such as *ha* or *me* in K display an 'archaic' / Early Proto-Iranian appearance. K is also characterized by many hapaxes, maybe in the process of being abandoned and which were not used anymore in Late Proto-Iranian texts.

During the 3rd millennium B.C. in Mesopotamia, the Proto-Cuneiform tradition evolved, witnessing an extension of its semantic field of use to non-administrative type texts, a reduction in the number of signs¹⁰, an increasing phonetisation, a cuneiformisation of the signs, and a new 90° anticlockwise orientation for the non-numerical value signs. The cuneiform script started also to spread around 2500 B.C. out of its historical Mesopotamian core to Syria, where it was discovered in Mari, Tell Beydar and Ebla. Based on the situation in the Late Proto-Iranian writing phase, a parallel evolution may probably be reconstructed for the poorly documented Middle Proto-Iranian writing phase, characterized by:

- the progressive abandonment of all the logogrammatic value signs while the fate of the numerical-value signs and numerical systems previously attested remains uncertain;

- a reduction in the number of phonetic-value signs, that from their original number (250 to 300?) fell at the end of this phase, around 2300 B.C., to ca. less than 100 signs; this reduction in the number of phonetic signs was probably triggered by a reflective practice on the

9. Concerning text O, Scheil (1935: p. XIV) noticed that "assez de signes rappellent ici le vocabulaire proto-élamite, -et cependant, au regard des dimensions du document, on trouvera qu'il contient beaucoup de signes nouveaux", while Meriggi (1971: p. 185) was proposing to consider O as belonging to "una fase di transizione" (see also Hinz 1969: p. 27; Steve 2000: p. 75).

10. From ca. 2000 signs around 3300-3000 B.C. (Uruk IV/III stage), to ca. 940 signs around 2800 B.C., ca. 800 around 2600 B.C. (Fara period) and 600 after that (Gelb 1963: p. 115 and Steve 1992: p. 3). In China, the process of simplification and standardization of the script was led by the Grand Councilor Li Si in 213 B.C. who notably ordered all books, except the archives of Qin, to be burned in order to consolidate Qin State control (Kelly 2007: p. 21).



writing system led by the scribes, and the first attempts to rationalize and standardize it;

- A regionalization process. As Early Proto-Iranian tablets are currently attested (in 2022) in South-Western (Susa, Tal-e Gezer, and Tal-i Malyan) and South-Eastern Iran (Tepe Yahya and Shahr-i Sokhta) as well as in the Northern Central part (plain of Qazvin/Tepe Ozbaki, plain of Tehran and Varamin/Tepe Sofalin and plain of Kashan/Tepe Sialk) of the Iranian Plateau, some regional variations could already be observed among these sites (Desset 2012: pp. 53-54; 2016: pp. 84) with numerical system variants attested in Tepe Yahya and Tepe Sofalin, while the Early Proto-Iranian anthroponomical sequences of Tepe Yahya differed greatly from the names recorded in Susa and Tal-i Malyan.

Around 3000/2900 B.C., Northern Central Iran was abandoned while during the 3rd millennium B.C., Fars (especially Eastern Fars) experienced an extensive de-urbanization process (Baneš/Kaftari transition)¹¹. This led to the creation of two culturally independent spheres, Susiana, more related to Western Zagros and Mesopotamia, and Kerman/South-Eastern Iran, related to North-Eastern Iran, Makkran, and the other side of the Persian Gulf. The Middle Proto-Iranian phase script was maintained in Susiana and Kerman, and the regional variation process observed in Early Proto-Iranian texts (as mentioned above) between Susa/Tal-i Malyan on the one hand and Tepe Yahya on the other, probably continued in the Middle Proto-Iranian phase and led to the creation of two distinct South-Western and South-Eastern traditions, clearly discernable in Late Proto-Iranian texts.

The Middle Proto-Iranian phase script represents an important stage in the development of the Proto-Iranian writing and urgently needs to be more consistently documented. New excavations investigating 3rd millennium B.C. Susa and Jiroft area could help in filling the gap between the Early and Late Proto-Iranian phases.

Last but not least, Indus writing appeared during this phase, around 2600 B.C., and was first used in the Indus valley core area before being diffused into the Persian Gulf littoral, Southern Iran and Mesopotamia as well as in Central Asia¹².

11. See Miller and Sumner 2003, for a minor occupation persisting at Tal-i Malyan during the Baneš/Kaftari transition phase.
12. Up to now, Indus script has been found (our gratitude to Andreas Fuls, and the Interactive Corpus of Indus Texts, for his help in establishing this list):

- in the Indus valley civilisation core: in Alamgirpur, Allahdino, Amri, Bakkar Buthi, Bala-kot, Banawali, Bhirrana, Chandigarh, Chanhujo-daro, Daimabad, Desalpur, Dholavira, Farmana, Ganweriwala, Gharo Bhiri, Gola Doro (Bagasra), Gumla, Harappa, Hissam-dheri, Hulas, Jhukar, Kalibangan, Kanmer, Khirsara, Kot-Diji, Lakhajjo-daro, Lohumjo-daro, Lothal, Mohenjo-daro, Naru-Waro-dharo, Nausharo, Nindowari-damb, Nuhato, Pabumath, Pirak, Rajanpur, Rakhigarhi, Rehman-deri, Rodji, Rupar, Surkotada, Tarkhanewala-dera, and Wattoowala;
- in Central Asia: Altyn Depe, Gonur Depe, and Shortughai;
- in Iran: Susa, Tepe Yahya, and Luristan;
- in the Persian Gulf: in Failaka, Hajar, Janabiyah, Karzakan, Qala'at al-Bahrain, Ra's al-Junayz, Saar, and Salut;
- in Mesopotamia: in Girsu, Kish, Nippur, Tell as-Sulema, Tell Umma, Telloh, and Ur.



D) 2300-2000 B.C.; Phase IV: Late Proto-Iranian writing (before the adoption of the cuneiform script by Hatamtite speakers)

Proto-Iranian writing displays a third stage of development (the Late Proto-Iranian script or, as previously labelled, the Linear Elamite writing). The process of sign reduction probably reached an end at that time, resulting with some 70/80 signs, with notably, as far as the decipherment could show it, a phonetic grid filled with 5 vocalic signs (/a/, /e/, /i/, /o/ and /u/), 12 consonant ones (/h/, /k/, /l/, /m/, /n/, /p/, /r/, /s/, /š/, /t/, /w/ and /z/) and the corresponding 60 (12x5) syllabic signs (for example: /ka/, /ke/, /ki/, /ko/ and /ku/). This phase is abundantly documented in the 23rd/22nd and 21st centuries:

- for the Western tradition (Susiana and Fars) by the inscriptions of Puzur-Sušinak in Susa (22nd century B.C.) and the Marv Dasht silver vessel (Q; 21st century B.C.);

- for the Eastern tradition (Kerman), by the inscription of Shahdad (S), the three tablets of Konar Sandal (B', C', and D') as well as probably texts on unprovenanced metallic vessels (M', A'/O', and N'; W could be slightly more recent; see Desset et al. 2022 and forthcoming).

The Western and Eastern traditions, probably diverging as soon as the Early Proto-Iranian texts, were then fully shaped and distinct. If most of the signs were common to both traditions, several signs were clearly different (*i, h, hi, k, ki₂, li₂, me, n, ne, ni, pi₂, ru₂, s, te, tu, wa* and *ze*).

With the development of the Persian Gulf trade, Indus writing reached many areas in the Near East through the maritime commercial highway. Another writing system was also seemingly created in Kerman: the geometric writing system, attested for now only in three bi-scriptural Late Proto-Iranian/geometric tablets (B'/α, C'/β, and D'/γ) found near Konar Sandal South (in trench XV) (Desset 2014). This phase was also characterized by the spread of cuneiform writing in Susiana around 2300/2250 B.C. with the Akkadian annexation of Susa.

E) 2000-1850 B.C.; Phase V: Late Proto-Iranian writing (with the adoption of the cuneiform script by Hatamtite speakers)

Around 2000 B.C., Mesopotamian cuneiform writing continued its geographic expansion, spreading from Northern Syria to Anatolia¹³, from Mesopotamia to Western Zagros and the Persian Gulf and from Susiana to Fars (cuneiform documents attested then in Tal-i Malyan). It is probably in this phase that cuneiform was also adopted as a writing system option to record the Hatamtite language in South-Western Iran (along with the traditional local Late Proto-Iranian script), ushering in a transitional period from 2000 to 1850 B.C. during which both scripts were considered as adequate to record the Hata-

13. Coming probably from northern Syria, to judge from the shape of the signs, Hittite scribes adopted cuneiform writing ca. 2000 B.C. probably in places like Kaneš (Rubio 2007: p. 45-48 and van den Hout 2007).

mtite language. It is interesting to consider that among the 18 inscribed *kunanki* vessels currently known and attributed to the rulers of the Šimaški and Sukkalmaḥ dynasties, from Kintatu to Pala-išan, ca. 2000 to 1850 B.C. (Desset et al. forthcoming):

- 5 are in Sumerian or Akkadian language, recorded with the cuneiform script;
- 13 are in Hatamtite language, including 2 recorded with the cuneiform script and 11 with the Late Proto-Iranian script.

A graphic evolution is clearly perceptible in the Western tradition between the texts of Puzur-Sušinak (22nd century B.C.) and Q (21st century B.C.) on one hand and the Kam-Firuz *kunanki* corpus (20th century B.C.) on the other¹⁴, as evidenced through the evolution of at least signs *h*, *k*₂, *ki*₂, *l*, *m*, *me*, *n*, *ri*, *ru*→*ru*₂, *u*, *wa*, *za* and *ze*. Still, when the graphic evolution of the Proto-Iranian script signs through its three phases of use is compared to that of Proto-Cuneiform/cuneiform signs from 3300 to 1850 B.C., it is obvious that the Iranian writing is characterized by a strong conservatism (particularly in the Eastern tradition). Very few changes in the graphic appearance of the signs can indeed be observed (most of the signs actually did not change at all between 3000 and 2000 B.C.). Early 2nd millennium B.C. Late Proto-Iranian signs are very far from the ‘curvivity’ displayed contemporaneously by Old Babylonian period cuneiform signs, which were adapted to allow for fast recording on clay. This conservative graphic tendency is also perceptible in the inner evolution of cuneiform writing in Iran where, after its adoption ca. 2300/2250 B.C., the signs almost froze with their Old-Akkadian-period appearance for many centuries.

F) After 1850 B.C. B.C., Phase VI: disappearance of the Proto-Iranian writing

Around 1850 B.C., the transitional period between the Late Proto-Iranian Western tradition and the use of cuneiform writing to record the Hatamtite language ended. The Proto-Iranian script was seemingly definitely abandoned in the course of the 19th century B.C. This was probably due to the then growing influence of cuneiform writing among the Hatamtite scribes (as illustrated by the Hatamtite cuneiform inscriptions of Šir-ūktūh and Sewe-palar-hūhpak in the late 19th/early 18th centuries B.C.; see Desset et al. forthcoming).

More or less at the same time (around 1850/1800 B.C.), the eastern part of the Ancient Near East experienced an unprecedented urban collapse (end of the mature phase of the Ancient Greater Khorasan/Oxus civilization; end of the Indus civilization; urban collapse of all Eastern Iran) which probably explains the disappearance of the Late Proto-Iranian Eastern tradition and that of the Indus script. The almost simultaneous Mesopotamian cuneiform influence in South-Western Iran and urban collapse in Eastern Iran brought to an end the age of possibilities for writing in the Near East. Cuneiform writing would dominate for the next 1000 years, save for the development of the Luwian hieroglyphic

14. On the *kunanki* corpus, see Desset 2018 and Desset et al. forthcoming.



system in mid-2nd millennium B.C. Anatolia and alphabetic innovations in the 2nd half of the 2nd millennium B.C. Levant.

The diffusion of Cuneiform writing in Susiana around 2250 B.C. and in Fars around 2000 B.C. opened the way for the succession of Western-derived writing systems used in the Iranian territory since then: Cuneiform, Greek alphabet, Aramaic derived alphabets (Parthian, Pehlevi, Avestan), Arabic derived alphabet, and Latin alphabet (cause of the current Fingilish phenomenon). Consequently, after 1850 B.C., no writing system used in Iran can really be qualified as Iranian any more, in the full sense of the term, as being a creation of the societies occupying this territory.

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