9

Horse Symbols and the Name of the Horse in Hurrian

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One of the first important results of the Mozan/Urkesh excavations, at least from the point of view of Indo-European studies, has been the discovery of a beautiful sculptural image of a horse head dating from the middle of the third millennium.[1] Following findings have shown a number of horse figurines coming from the store room of Tupkish's palace (about 2200 B.C.), some of them representing the domesticated animal.[2] These numerous figurines belonging to the next period of the history of Urkesh in the last quarter of the third millennium B.C. make it clear that the horse was extremely important for the life of the society. Particularly interesting seem horse figurines showing the harness and thus documenting the use of horses in transportation.[3]

These unique signs of the role of the horse in the Northern part of the Mesopotamian area on the border of Asia Minor can be compared to the previously discovered earlier statuettes and vase drawings of horses and other equids in Mesopotamia, Elam (Susa) and adjoining areas of Iran.[4] Chronologically close to the latter are bones of horses found

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[1] Buccellati, Kelly-Buccellati 1988, pl. 1. For much later representations of the horses, possibly continuing the same Hurro-Urartian tradition, one may compare for instance a horse head from Karmir-Blur (Piotrovskij 1962, 341, fig. 49). Other Urartian horse images: Khodzhash a.o. 1979, fig. 60, 124; Piotrovskij 1962a.

[2] Buccellati, Kelly-Buccellati 1997 and R. Hauser's article in this volume.

[3] See R. Hauser's article in this volume, Ill. 4.

[4] Cf. previous literature in a chapter on the horse: Gamkrelidze, Ivanov 1995/1984, I, 463-482 with references. The zoological interpretation of some figurines of quadrupeds (cf. for instance an item from Gavra-VI: fig. 109 in Childe 1950, 215) is not always clear. On earlier figurines interpreted by some scholars as the images of the harnessed horse from the Balkanic area in the Northwestern part of the

145

in Asia Minor in the Bronze Age period. For a comparison to the Mozan/Urkesh discoveries, particularly interesting seem data from the neighboring Norşun Tepe of a much earlier age as well as from other places in Anatolia: Demirci Höyük[5] and Yarıkkaya. From this point of view it is interesting to compare materials pointing to the spread of horses in the Transcaucasian area, particularly the adjacent Armenia (ancient Hajasa and Urartu)[6]; the earliest trace of the horse in Georgia comes from Kvacxelebi in the very beginning of the third millennium B.C.

The Caucasian Caspian area seems to be connected to the Lower Volga culture where the horse sacrifice and the horse cult are documented at a most early age (starting with the border of the fifth and fourth millennium B.C.). The steppe region between Xvalynsk (in the Volga steppes) to the East, Dereivka (on the Middle Dniepr in the North-Pontic region) and the Cucuteni-Tripolye culture to the West has been supposed by some scholars to be a possible area of horse domestication and maybe also a homeland of Indo-Europeans whose spread has been possibly connected with the use of horses.[7] In Dereivka many horse bones (probably showing that this was the favorite food of the population and a main object of hunting) were found. The study of microscopic bit microwear on the premolar teeth of a stallion from Dereivka[8] has been supposed to demonstrate a trace of early domestication; comparable results are found on ten percent of horse premolars from Northern Kazakhstan in the second half of the fourth millennium B.C. It is suggested that early horseback riding originated in the same area, leading to enormous changes in the means of transportation.[9] It seems possible that the whole Pontic-Caspian area and the neighboring parts of the Kazakhstan and Western Siberian regions may be important for the early use of the horse as a preferred object of hunting and a cultic animal that later lead to its domestication. No matter where and when exactly (in the fourth-third millennia) the horse had been first used for cultic purposes and then

Circumpontic zone, see Gheorghiu 1994 with references.

[5] Rauh 1981; cf. Boessneck-Driesch 1976.

[6] Arutiunian 1964, 143-195.

[7] Anthony 1986; 1991, 209-213, fig. 1-3; 1995. Details of Dereivka findings: Telegin 1986.

[8] Anthony, Brown 1991; 1991a. On the basis of experimental studies a suggestion has been made that the stallion was bitted over a period of no less than 350 hours of riding: Anthony 1995, 559.

[9] Sherratt 1983; Sherratt and Sherratt 1988; Anthony 1994. According to Anthony horse was used only for riding.

domesticated in this large area, according to several scholars[10] it is only starting with the beginning of the second millennium B.C. that we find direct evidence on its military use to draw chariots in the Ancient Near East.

The Hurrian data found by the Mozan/Urkesh excavations are quite exceptional from this point of view. Here for the first time the use of the horses in a palace economy and everyday life is documented for the last part of the third millennium B.C. For the beginning of the next millennium the role of horses and also of special officials (*RABI SÍ. SÉ.E*) who were in charge of them is known through the Old Assyrian tablets from Asia Minor.[11] Approximately to the same period an archaic Hittite poem (originally composed in the old capital of Nesa=Kanish) mentioning the god Pirwa belongs (it is known through a copy of a later period). In Hittite texts the god is described as being connected to a horse[12] and his name may be traced back to an Indo-European one.[13] Theophorous names containing this element are well represented in the Old Assyrian tablets. The military function of chariots drawn by horses is first attested in the Old Hittite inscription of the king Anitta.[14] The outstanding role of the horse as a main domestic animal and terms connected to its training are well documented in the old version of the Hittite laws.[15] Although it is not clear to what extent the Hurrian cultural influence could be found at this early stage in Asia Minor, in the next period the horse training in the Hittite Empire was apparently at least in part influenced by the Hurrian-Aryan Mesopotamian tradition of Mitanni. The Hittite hippological texts of this time are composed by Mitannians using Mesopotamian Aryan and Hurrian (and also Luwian)

[10] Hančar 1955; Levine 1990, cf. Bosch-Gimpera 1961, 71. The same view: Trifonov 1987, 26, n. 28. To the same period the looped rods might have belonged that had been earlier identified as bridle-bit cheekpieces: Trifonov 1994, 358. Before that period the proto-chariots (without yokes, poles and spokes) were drawn by oxen (indications about these older devices are found also in the Hurrian mythological texts).

[11] Kammenhuber 1961, 13 with references. On the meaning of the term ("an official in charge of charioteers"?) cf. Starke 1995, 121, n. 244.

[12] Kammenhuber ib., 36, n. 142; Otten 1952/1953; Haas 1994, 412-425, 499 (with bibliography). In later Hittite texts besides a sacred horse Erama in the (H)išuwa-festival a deified horse (written logographically ᵈANŠE.KUR.RA, KBo XX 245 I 5') is mentioned, Haas 1994, 417, 856, n. 32. But the name of the god is missing here as well as in many places where the horse deity is meant; see the chapter on the horse deities and horse cults in the recent handbook by Haas 1994, 412-428.

[13] Gamkrelidze, Ivanov 1984/1995, 695-696.

[14] Hrozný 1929; Neu 1974; Starke 1995, 124, 121, n. 244.

[15] Starke 1995, 125.

technical terms.[16] In the light of the Mozan/Urkesh discoveries it seems possible that this Mitannian tradition was not determined only by the Aryan influence, but might be to some extent continuing the older Hurrian customs, as the Urkesh period precedes this Hurrian-Aryan symbiosis of the second millennium B.C.[17] However, linguistic data suggest an earlier Hurrian (or possibly Northern-Caucasian-)Indo-European contact in this particular branch of activity.

The Hurrian name of *horse* is of utmost importance for this problem as well as for the whole question of Indo-European origins and migrations in so far as it is related to the domestication and use of horse.[18]

The name was deduced by Otten from a partial Hurrian-Luwian-Hittite bilingual text belonging to the hippological cycle. After a short Hittite introduction a Hurrian passage mentioning horses (*iš-ši-ya-na-a-ša*) is inserted, then a Hittite translation of a corresponding Luwian fragment follows where the horses are designated by a Sumerian logogram (KUB XXIX 44 + 48 + 55 + KBo VIII 50 = CTH 285,1 Vs.I):[19]

4   *I. NA* É ^{LÚ.MEŠ}IŠ (=*iš*-²⁰)-*kán an-da-an* [...]

5   *Ši-pa-an-taḫ-ḫi nu* ^D*Pi-ri-i*[*n-ka*]*r* [^D*IŠTAR*]

6   *ḫal-zi-iḫ-ḫi nu ḫur-li-l*[*i ki-iš-ša-an*]

7   *iš-ši-ya-na-a-ša pa-a-a*[*h-ri-e-e*?]²¹

8   ^D*Pi-ri-in-kar* ^D*IŠT*[*AR*

9   *lu-ú-i-li-ma-at ki-i*[*š-ša-an*]

[16] Kammenhuber 1961. On the relationship between native Hittite, Luwian, Hurrian and Aryan traditions in connection to hippology see now Starke 1995.

[17] Still there are such important (Indo-)Iranian borrowings in Hurrian of the early period as *tarri* "fire" (Avestan *ātar* "fire") that is attested in the Hurrian text of a large bilingual written probably in the beginning of the second millennium B.C. (Neu 1996).

[18] Hänsel, Zimmer 1994; Adams, Mallory, Miller 1997.

[19] Otten 1953a, 13; 1953, 24-29; Rosenkranz 1952, 3-4; Kammenhuber 1961, 150-151; Starke 1985, 370-371; the text presents a later copy of the original dating around fourteenth century B.C. On the interrelationship of Hurrian and Luwian elements in respect to this text see now Starke 1995, 123 and n. 252.

[20] According to a suggestion by Rüster and Neu 1989, 162, the cuneiform sign for ^{LÚ}IŠ "charioteer, coachman" probably stands for the first syllable *iš* of a Hittite metonymic genitive ^{LÚ}*išmeriyaš* "man of the bridle, a palace official."

[21] A damaged continuation of the Hurrian stem [*fahr-*] "good" should contain one of its derivatives, cf. for those forms that appear in the texts: Laroche 1980, 292-293; Neu 1996, 66, 252, 434.

10 *A.NA* ANŠE.KUR.RA^{HI.A} *an-da aš-š[u-li]*

11 *ar-du-ma-at*

"In the house of the coachmen [...?[22]]= in the stable I am delivering a prayer accompanied with sacrifices. And I am addressing Pir[inka]r (and) [(Hurrian) Ishtar (=Shaushka)]. And I am [speaking in] Hurrian [in the following way]: 'Pirinkar (and) (Hurrian) Isht[ar] (=Shaushka)! [make] the horses prosp[erous!].' 'And in Luwian I [am speaking] in the follow[ing way]: for the prosperity of the horses apply yourselves!'"

The interpretation of the divine name *Pirinkir* (that is connected to the horses and to the stable also in the festival CTH 644[23] and is considered to be a "Pferdegottheit")[24] was given by Laroche[25] on the base of the lexical equivalencies in the bilingual list An found in Meskene/Emar:

N185 NIN.SI₄.AN.NA = ᴰ*Wi-re-en-gi-ru-un*

N205 U₄.UG = ᴰ*Bé-re-en-gi-ru-un*

N206 U₄.UG.URU.KI = ᴰ*Bé-re-en-gi-ru-un ar-ta/du-ma-an-zi*

Thus the goddess *P/Wirinka/ir-* **[*Firinki/ar*]* "of the city" (*ardi*) attested in Hurrian Boğazköy texts in a sequence *allai* ᴰ*Pirinkir* "the Lady[,] Pirinkir" [KUB XXXIV 102 II 12) was identified with the Mesopotamian "(Great) Lion(ess)" (one of the images of Mesopotamian Ishtar-Inanna)[26] and with the Babylonian goddess Ninsianna that was

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[22] A lacuna may be absent, Kammenhuber, ib.

[23] The horses seem to be the central symbol of the festival: KUB XXIX 56 + KBo VIII 54; 83 + KBo X 44 + KBo XXXIV 172 + VBoT 128 + KUB LI 14 + KUB LIV 43, cf. Kammenhuber, ib., 40-41, n. 4; Haas 1994, 416, n. 36.

[24] Haas 1994, 415-416.

[25] Laroche 1980, 201 and 54; 1989, 10 (spelling *Wirengirun*), N 206 corresponds to ᴰ*ÙM* ᴰ*ALI*ᴷⁱ, ᴰUD.UG = *ÙMU*, cf. important comments in Güterbock 1982, 35; Haas 1994, 415, n. 32 (all the references are to the quotations from the list in Laroche).

[26] See Fauth 1981; Wolkstein 1983, 84-85. On the images of lions in connection to Ishtar see also Trifonov 1987, 23 with further references.

considered to be the planet Venus and was also quite similar to Ishtar or one of her personifications or *avatars*.[27] The image of a shining astral body explains why in the Boğazköy texts the goddess Piringar is a solar disc (KUB XXIX 71 I 13). She appears (as in the passage just cited) as belonging to the group related to Ishtar (Hurrian Shaushka designated by the Mesopotamian logogram for Ishtar). Both deities are bisexual in Mesopotamia (Ninsianna in one Old Babylonian letter[28]) as well as in Asia Minor: in Yazılıkaya Pirinkir belongs to the group of the male gods according to Laroche and Güterbock.[29] In her female image she may be harmful[30] (is related to the sorcery and to the "curse"—Hittite *hurtiyaš*, KBo XXI 41 + Ro 69), and is connected to the temple of the Black Goddess.[31] Her identification to a lion(ess), as seen from the Meskene list cited above, was used by Laroche to confirm the link of her Hurrian name to Sumerian PIRIG.GAL> Hurrian *Piringir*;[32] another etymology links the name to the highest goddess of Elamian pantheon of the third millennium B.C. *Pinikir*.[33]

As suggested by Laroche to the deity PIRIG.GAL, the Hurrian interpretation of which was made possible by the list from Meskene/Emar, the temple had been dedicated that had been built by Tish-atal. His inscription after introducing his title says according to Laroche's reading: *pu-ur-li* ᴰPIRIG.GAL *pá-ᵓà-àš-tum* "(he) built a house=temple of the god(ess) Great Lion(ess)."[34] The main objection that has lead many scholars to accept

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[27] Langdon 1926, 18, n. 1, 26, n. 4, 28, n. 4, 30, line 16, 42 with references.

[28] Güterbock, ib., with reference to F.R. Kraus, RA 65 (1971), 30 f. On Hurrian Ishtar cf. Archi 1977, 299ff.; Wegner 1981.

[29] Güterbock 1982, 35, fig. A and C (N 31).

[30] Cf. Langdon 1926, 26, line 16.

[31] Kronasser 1963, 241; Haas 1982, 180.

[32] Laroche 1980, 201; that identification was accepted also by Güterbock, ib. On variants of the name: Haas, Wilhelm 1974, 179. The only possible difficulty consists of the explanation of the final part of the word following the name of the lion(ess). Perhaps one may also think about a possible morphological adaptation; see the type of Hurrian names like *Fazanigar*, Neu 1996, 364, cf. also *Pizikarra* (ib., 592: index s.v.) reminding of *Piringar* (**firiŋa/ir* may be an interpretation for the old Hurrian period, cf. variants *Pi-ri-ki-ir/Pi-ri-kir*).

[33] Haas 1994, 415 (with references). As another probable interpretation one might have thought about a combination of *Pirig* with *Na-gar* mentioned later in the same inscription of Tish-atal (see the article by Wilhelm in this volume): *Pirig* + *Nagar* > *Piringar*?

[34] Cf. Parrot, Nougayrol 1948, 14; Diakonoff 1967, 444; Xachikian 1985, 90; Nozadze 1978, 28,n. 44; before the Meskene/Emar discoveries (Laroche ib.) all the scholars followed the Hurrian reading of the divine name as Ner(i)gal as Haas 1994, 542 (see on the same name in the Araphe region ib., 544) still

the reading *Nergal* instead of PIRIG.GAL (see Wilhelm's article in this volume) concerns the geographical and temporal differences in the attestation of the name. But still there is a possibility of a very long Hurrian tradition connected to it. In the light of the recent Urkesh excavations and Meskene lists it can be suggested that the role of horses and their images near the temple (according to Laroche's hypothesis) of the Great Lioness in Urkesh might have been connected to the beginning of this old tradition still continued in the Hurrian hippological rite of the fourteenth century B.C. cited above. Such characteristic symbols as the image of the reclining lion on the seal of Tupkish, the Hurrian king of Urkesh,[35] as well as of the image of the star on the seal of the Urkesh queen may be connected to the iconography of Mesopotamian Inanna-Ishtar approximately of the same period.[36] The bronze lions of Tish-atal in connection to which the inscriptions of the king were written seem to represent the lion(ess) image of the goddess. As to the Hurrian goddess Shaushka designated by the logogram of Akkadian Ishtar there are many indications of the ancient connection of this Mesopotamian and Anatolian goddess to the horse.[37] From the typological studies of the militant goddesses of the type of Hurrian Shaushka some of whom have a lion-like image[38] it is known that one original cult may be split into several deities at the late stages of the development of mythology.[39] The Great Lioness was originally only one of the avatars of Ishtar. Thus for the Urkesh period it might be possible that the Hurrian reading of logographic PIRIG.GAL (if one accepts Laroche's interpretation) might have been *Šauška* that was at the same time *Firiŋa/ir*. But more than half a millennium later the Hittite translation uses the verbal form of the second person plural while addressing both Pirinkar and Ishtar=Shaushka; they have become two separate deities retaining the link to the

does although he cites Laroche's findings. See also remarks against the reading PIRIG.GAL in Wilhelm's article in this volume where the reading *Nergal* is accepted.

[35] Buccellati, Kelly-Buccellati 1995-1996; 1996.

[36] See for instance, Williams-Forte 1983, 189, fig. 52; 92; 195, fig. 100;196, fig. 102.

[37] Leclant 1960; Cornil and Lebrun 1972, 13-14; Haas 1994, 414-415. As the Mycenaean Greek 'lady of horses' ([po-]ti-ni-ja i-qe-ja = Potniāi hiqqʷeiai) is at the same time close to Artemis (Lydian *Artimi-*) and to Ishtar (see Levi 1951) it is possible to identify the name of *Artemis* in her function of the goddess of *polis* and the epithet of the Hurrian goddess *ar-ta/du-ma-an-zi* "belonging to the city."

[38] Diakonoff 1990, 100, 145, 158, 159, 170, 215 a.o.

[39] Ib., 229, n. 129.

horses.[40] It is possible that the latter may be explained by the military usage of horses important for the militant goddess. Since in the time of the Hittite Empire Shaushka was protecting mainly or only the members of the ruling Hurrian dynasty[41] it might be interesting that Hattushili III in his biography while praising the protective force of Hurrian Ishtar starts his career as "a man of the bridle." Both this official position of a young prince and his life-long obedience to Ishtar may reflect the ancient Hurrian tradition.

The Hurrian form *iššiyanaša* "to the horses" in the ritual text quoted above contains a postponed (suffixed) definite article -*n*- and a morph of the plural -*š*-. The stem *iššiy*- "horse" has initial vowel *i*-. Most of the other cases in the Boğazköy texts have the initial vowel *e*- written with *Pleneschreibung*: the ergative singular with a suffixed article *e-eš-še-e-ne-e-eš* "by the horse (as an active agent)" (KBo XI 19 Vo 17); an absolutive singular *e-eš-še-ni-e-* (+ the associative-enclitic *ma*, KBo XXI 18 10); a comitative (*e*)-*eš-ši-ra* in a list of weapons and other military objects KBo XV IIV 23, 37. Thus the main Hurrian shape of the stem may be *ešši*- [ešša-]; the corresponding Urartian noun is always hidden under a logographic writing or its Akkadian complement as in ANŠE. KUR.RA^MEŠ-*Ú-Ú* "horses" (=*SISÛ*^MEŠ).[42] Since the meaning of the Hurrian word was discovered it has been supposed that it was an old borrowing from an Indo-European satəm dialect.[43] Although it still remains as a possibility the situation seems now more complicated.

It was supposed that the Hurrian name of "horse" might be related to the Northern Caucasian one reconstructed as *ħi[n]čwx̌ on the base of Lezghi *ʔinšʷ> Lezghi *šiw* "steed," Archi *nolš* "horse" (with a probable metathetic initial *n*- and an original week - *šʷ seen in the ergative form *nilš-i*); Avar-Andi *ʔičʷa "horse, mare" > Avar *ču* "horse," Andi *iča* "mare," Akhvakh, Tindi and Karata *ičʷa* "mare"; Lak *čʷu* "horse," Khinalug *pši* "horse"; North-Western Caucasian *čʷə > Abkhaz a-čə "horse," Adygh *šə* "horse."[44] If the Hurrian form is traced back to this Northern Caucasian prototype

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[40] Still in describing the ritual for the goddess Laroche 1971, 126-127 (CTH N 718 with references) speaks of one deity "Ishtar-Pirinkir;" in the recent computerized version of CTH by B. J. Collins (http://scholar. cc.emory.edu/scripts/ASOR/CTH 718.html) the neutral spelling *ISHTAR pirinkir* was accepted.

[41] Laroche 1966, 293.

[42] The context is not clear: Melikishvili 1960, 158-159.

[43] Otten 1953, 25; Dzhaukian 1967, 52, 181, n. 61.

[44] Nikolayev, Starostin 1994, 520; Diakonoff, Starostin 1986, 34; etymology 67; Starostin 1987, 458.

its relationship to Indo-European may be seen in the light of the general problem of the terms of cattle breeding, agriculture and related semantic fields shared by these linguistic families. In a special work on this subject Starostin suggested that all these terms were borrowed from Proto-Northern-Caucasian (or from a dialect of it) into Proto-Indo-European in the beginning of the fifth millennium B.C.[45] possibly in the area of the Near East to the south of Transcaucasus.[46] But the borrowing of the name for horse (as for many other domestic animals) should be motivated by its domestication. Although really to distinguish between the names of wild and domesticated horses is not easy,[47] still the fact of borrowing points just in this direction and helps to connect linguistic and archaeological data. There is no reason to borrow a name of a wild horse. But immediately after its domestication the name is borrowed together with the necessary technical knowledge. Archaeological data make it possible in the third millennium B.C., less probable in the fourth millennium B.C. (particularly in its second half), but not earlier (see the references above). In linguistic terms that means that the borrowing might have come through the dialects of the Northern Caucasian and Indo-European protolanguages that should have been dispersed by that time. But in that case the main argument given for the direction of borrowing (from Proto-Northern Caucasian into Proto-Indo-European and not the other way) by Starostin loses its force since it applies to the bulk of the oldest borrowings not having a subsystem of simplified phonetic rules and not to one isolated loanword. In that case one should take into consideration the phonetic correspondences. The fricative *šš[š]* in the Hurrian name of horse and a corresponding affricate **č* (> *š*) in the forms of the other Northern Caucasian dialects

To accept this Northern Caucasian etymology of the Hurrian word one should suppose that the nasal phoneme had been dropped at an early stage (as in most Northern Caucasian dialects that makes its reconstruction controversial), since otherwise the group **nd-* should have been expected in Hurrian. Blažek 1992, 10, suggests also a link of the Indo-European and North Caucasian word to the Yenisseyan **ku's* "horse" (understood by him as a second part of a compound), but see its explanation as a borrowing from a *centum* Indo-European dialect: Gamkrelidze, Ivanov 1984/1995, 832, n. 2, and another North Caucasian etymology: Starostin 1995, 240. The ancient Northern-Central-Asian area of the homeland of Proto-Yenisseyan (as seen through the hydronyms) seems to lie close to the region of the early spread and possible domestication of horses.

[45] Starostin 1988, 153-154. Among the forms discussed in this way Starostin enumerates also the Northern Caucasian and Indo-European terms for the horse: Starostin 1985, 77, etymology 13; 1988, 114-115, etymology 2.

[46] Starostin 1985, 89. Thus the term "Northern Caucasian" has only a traditional conventional meaning since the protolanguage of the family was spoken in this Southern area.

[47] Hamp 1990; Mallory 1996, 9.

corresponds to a Proto-Indo-European palatal stop *k' that has become an affricate *č and then a fricative š/s in the Indo-European dialects of the satəm type[48] (Old Indian áśva-, Avestan aspa- "horse," Mitannian Aryan aššu-, Luwian aššuwa-, Lycian esbe, Old Lithuanian ašvá/ešvá) while fusing with non-palatalized *k in the centum dialects (Latin equus, Old Irish Ogamic eq- > ep-, Germanic Runic ehw-ē, Gothic aihwa-, Tocharian B yakwe, A yuk "horse.")[49]

From the point of view of general typology a phonetic development of a palatal or palatalized velar stop to an affricate and fricative is a normal one; but the reverse movement from an affricate of dental type to a velar stop seems quite extraordinary.

In connection with the Indo-European name of a horse the idea of borrowing has been often suggested because of the phonological difficulties in comparing the dialects.[50] Practically two quite different, if not completely incompatible, forms can be reconstructed for Indo-European: one that explains the Greek form (maybe as a possible borrowing) and the form *(H)ék'wo- with an initial vowel *e and an original palatal stop *k' + w[51] that existed before the change of palatals in the satəm area and is common to all the other dialects including Luwian.

Mycenaen Greek i-qo (with a variant i-po in a compound i-po-qo-qo = later Greek ἱππο-φορβός "horse breeder"[52]) and later alphabetically written ἵππος with a dialectal variant ἵκκος and a proper name Ἴκκος corresponding to it (showing later delabialization) make it possible to reconstruct *hikʷkʷo- "horse" that has three phonetic features different from the rest of Indo-European and defying normal laws of Greek development:[53] 1) initial *h- (that is absent in the dialectal variant and in some composite proper names with this second element that sets some scholars thinking about relatively late—probably post-Mycenean?— age of this initial); 2) vowel i in the root; 3) gemination of intervocalic labovelars (or simple velars in a dialectal variant). These abnormal

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[48] The same correspondence is seen in the other borrowings discussed by Starostin 1985, 92, n. 28; 1988, 145-148.

[49] On the name of horse in Indo-European and in separate languages cf. Hamp 1990; Meid 1994; Zimmer 1994; Plath 1994; Eckert 1995; Starke 1995, 118-120.

[50] E.g., Lehmann 1986, 15; 1993, 247.

[51] Hamp 1990; Meid 1994. On the base of the general laryngealists' avoidance of initial vowels a laryngeal (H₁) is reconstructed in the beginning of the word.

[52] Explained by regressive dissimilation: *kʷ...*gʷ: Lejeune 1972, 47, n. §33-3; Panagl 1985, 286.

[53] Lejeune 1972, 83, n. 1; 190, n. 2; 280, n. 1; Panagl 1985, 283.

features make it evident that the word does not belong to the ordinary vocabulary. There are several possible explications. An Indo-European protoform *s̑k"o- "horse"[54] may be reconstructed that can be supposed to have relationship to *ek'wo- > *ek"o- in its dialectal Western Indo-European *centum* form. A hypothesis based on this reconstruction of the initial *s- > h- might suggest a link of the Greek *hik"k"o- < *sik"o- to the Semitic name of *horse*: Akkadian *sisû* (possibly from *sisâ'um*, cf. the spelling ANŠE.ZI.ZI = *[ᴬᴺŠᴱsisī] in Southern Mesopotamian texts at the end of the third millennium B.C.[55]), Aramaic *sûsyâ*, Ugaritic *śśw/ssw* (*sswm*, feminine dual *śstm*, also in personal names), Hebrew *sûs*. The Semitic noun has been often thought together with Egyptian *śśm.t*[56] to be borrowed from Indo-European with a possible later reduplication.[57] But if the Semitic word is connected to the Indo-European one practically only the Proto-Greek stem with the initial *s- seems to present a valid parallel although the reflection of the intervocalic consonants in Semitic is of the *satəm* type. It looks as if the Indo-European dialect interfering with Semitic was a *satəm* one, but with a structure of the initial as in Greek. In the prehistoric Semitic-Greek contacts it was usually Greek that borrowed.[58] If the direction of borrowing in this case was the same the Semitic word itself should have been borrowed earlier from some other language where the intervocalic group was closer to the Greek type.[59]

From a geographical point of view the closest one to Hurrian among the Eastern Indo-European dialects was Armenian. In it a general Indo-European word for *horse* was

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[54] Cf. a similar protoform reconstructed by Goetze in an attempt to reconcile forms of different families: Goetze 1962, 35; Gamkrelidze, Ivanov 1984/1995 478, n. 21. The first to propose an old form *sesqw- > seqw- was Marr 1922; 1933, 142-143, but as usual his brilliant idea is lost among a lot of absolutely fantastic suggestions.

[55] Civil 1966; Gamkrelidze, Ivanov 1984/1995, I, 478.

[56] References to horses start only with the XVIIIth dynasty.

[57] Bibliography by Ellenbogen 1962, 123; Gordon 1967, 450-451 (item 1780). Cf. Ebeling 1951.

[58] Masson 1967; Szemerényi 1974 (with references).

[59] See Gamkrelidze, Ivanov 1984/1995, 482, on the possible traces of a very old migratory term in Egyptian *sk* "foal of ass," Coptic *seǵ* "foal of an ass, horse" comparable to Old Turk *ešk/glj/Øäk* "donkey," Classical Mongolian *elǰigen* "donkey" from an Altaic dialectal form common to Turk-Mongol; cf. also in Northern Eastern Caucasian Proto-Tzez-Khvashi *šigʷə "mare" > Tzezi šigʷə, in other dialects a name of donkey, Nikolayev, Starostin 1994, 444-445. In many languages a horse was later called by a name initially referring to another equid that before the domestication of horses had been more important from the economic point of view (as donkeys still were at the time of the Old Assyrian colonies in Asia Minor).

substituted by *ji* related to a Vedic poetical *háya*.[60] Pedersen and after him several other scholars[61] suggested that Armenian *ēš* "donkey" reflects the old Indo-European name for the horse; the process might have been described as a chain reaction during which the widening of the sphere of usage of a poetical term (*ji*) lead to a change of meaning of its synonym *ēš*. But according to another idea followed by Benveniste[62] the latter goes back to Sumerian ANŠE "donkey" which in its turn Starostin[63] explains as a borrowed Northern Caucasian term for *horse* discussed above. According to Starostin the Armenian word as well as Mediterranean *Wanderwörter* like Latin *asinus* may be traced back to the Hurro-Urartian source having a suffix *-n*.[64] Having in mind the large number of Hurro-Urartian loanwords in Armenian Starostin's suggestion on the possible connection between Hurrian *ešše* "horse" and Armenian *ēš* "donkey, ass" seems plausible. On this example one may see how difficult it is to distinguish between Hurro-Urartian, Northern Caucasian and Indo-European particularly in the case where the phonetic development caused the shortening of the form and only two phonemes remained.

If the Hurrian name of horse does not come from Proto-Northern-Caucasian but is borrowed from Indo-European (as the phonetic considerations suggest) the closest match in the sat*ə*m dialects can be seen besides the Armenian word in the consonant structure of the South Western Iranian form like Old Persian *asa* "horse." The vowel in the Hurrian word if it is a dialectal (Iranian) borrowing still seems to go back to the time before the change **e* > *a*.

But if one supposes that the Hurrian word might have underwent such changes as loss of the labial glide then it (and some other dialectal Northern Caucasian forms) may be derived from the protoforms suggested for Mesopotamian Aryan *aššu-* or Luwian

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[60] Gamkrelidze, Ivanov 1995, 463 (with bibliography).

[61] Lamberterie 1978, 262-266, n. 1. Werner Winter in his recent study of the word suggested that the Hurrian name of a horse was borrowed from Armenian which meets semantic difficulties: at the time of borrowing the Armenian word should have had the original Indo-European meaning that changed later.

[62] See Ernout, Meillet 1994, 51.

[63] Starostin 1988, 115. The weak part of this etymology is the root element *-n-* which is not well documented in Eastern North Caucasian and is absent both in Hurrian and Western North Caucasian (see above).

[64] Another explanation of the Latin word as a compound **as-onos* "weight-bearer connected to Asia" was suggested by Pisani 1979, 495, who at the same time accepted the link of the Sumerian and Armenian terms.

aššuwa- that would correspond to the idea of the Indo-European homeland being located somewhere close to the oldest Hurrian kingdoms. A *satəm* dialect of Proto-Indo-European that might have been a precursor both of Proto-Aryan and Proto-Luwian might have been a source of (dialectal) Northern Caucasian terms. The Kartvelian form **acua* in which a borrowing either from Northern Caucasian[65] or from Iranian[66] or some other Indo-European[67] source was supposed may be traced back to the same archaic dialect where the old palatals were reflected as affricates and the labial glide was preserved after such an affricate in the name of horse (the vowel *a* can be accounted for both by the rules of later Aryan or Luwian phonology).

It seems that the great Lithuanian scholar Būga was the first linguist to suggest as early as in 1923 in his review of Schrader's *Reallexikon* that the name of *horse* helps to establish the absolute chronology of the Indo-European *satəm* dialects[68] (at that time he could see the *terminus ante quem* in the Mitannian Aryan dialect attested by the middle of the second millennium B.C.). Unfortunately, his remarks being published only in Lithuanian did not find immediate continuation. But we may say now that the chronology of the domestication of horses (starting with the fourth millennium B.C.), of the spread of early Indo-European dialects (the same date according to glottochronology), of the restructuring of consonants in their *satəm* branch and of their contacts to Hurrian and other Northern Caucasian dialects and Kartvelian and Semitic makes it possible to seek for important synchronic intersection of these events around the border of the fourth and third millenniums B.C.

Acknowledgements

[65] Nikolayev, Starostin 1994, 520-521.

[66] Klimov 1994.

[67] Gamkrelidze, Ivanov 1995, 479, 813.

[68] Būga 1961, III, 680-681.

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