



The Three Skies of the Indo-Europeans

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Abstract

The paper aims to describe the approach that Indo-Europeans had about cosmogony and the structure of the sky. It especially relies on the Greek, Latin and Hurrian conceptions. It is shown that the Indo-European cosmogony envisions the sky as three layers: the Upper-Sky, the Middle-Sky and the Lower-Sky. The gods and celestial bodies in each sky are different and have specific roles, names, colors and attributes. An appendix at the end lists the words and roots discussed in the paper.

Keywords: Indo-European, Comparative Mythology, Cosmology, Greek, Hurrian

Introduction

The paper aims to describe the approach that Indo-Europeans had about cosmogony and the structure of the sky. It especially relies on the Greek, Latin and Hurrian conceptions, which are quite close, though some comparative differences can be noted. In that respect, the Sumerian-Akkadian approach is significantly different. It is shown that the Indo-European cosmogony envisions the sky as three layers: the Upper-Sky, the Middle-Sky and the Lower-Sky. The gods and celestial bodies in each sky are different and have specific roles, names, colors and attributes. Comparative analysis permits to reconstruct the core theory of the Indo-Europeans, sieving probable conservatism and probable innovations.

General features of the Indo-European cosmogony

Similarities between the Greek and Hurro-Anatolian cosmogonies have long been noticed. The relevant myths belong to the so-called Kumarbi Cycle (Hoffner, 1990, pp. 40–65). It narrates how successive gods fought each other to conquer the throne of kingship. A bibliographical account and summary of the Cycle is given in Hoffner (Hoffner, 1990, pp. 40–42).

Contrary to the Biblical account of the Genesis, which is peaceful, the cosmogony depicted in the Kumarbi Cycle is fairly conflictual and gods are in a kind of perpetual warfare. The other main feature is the three layers of rule over the sky.

The first primeval god is Alalu, who is dethroned by Anu, who in turn is dethroned by Kumarbi, the son of Alalu. Anu is not a relative of Alalu and Kumarbi, and seems quite obviously borrowed from Sumerian AN 'sky'. To some extent, Anu appears to be a usurper and an intrusive component in the regular line of inherited kingship, so to speak, a Semitic graft onto the original narrative. Alalu is usually also considered to be from Semitic. The Ergative form *Alal-uš*

with *u*, instead of the most frequent *-i(š)*, is in favor of a Semitic origin, but a link with PIE **al-* 'to feed, grow (tall)' is nevertheless thinkable.¹ Hurrian accepts adjectives with *u*-ending like *ašmu* 'fat' or *mušu* 'just', so *Alalu* may be a native adjective, similar to Latin *altus*. The native origin of *Alalu* is thinkable, so much so as Semitic **ilu* 'god' normally does not have *a*-vowel. So a native reduplicated adjective **al-al-u-* 'very high' is thinkable.

Kumarbi wants to emasculate Anu to make sure he would not beget any new adversary to his own rule, but, on emasculating Anu, Kumarbi gets impregnated by Anu's manhood and begets Teššub. A fierce war then begins between Kumarbi and his son, the storm-god Teššub.

The Hurrian triplet: *Alalu*, *Kumarbi*, *Teššub* is parallel to the Greek triplet: *Ouranos*, *Kronos*, *Zeus*. Etymologically, *Alalu* may derive from PIE **al-* 'to feed, grow (tall)'. I have proposed to analyze *Kumarbi* as **k̄m-arbi* 'hundred-years old', the equivalent of *Kronos*, usually depicted as a very old god.² As for *Teššub*, it is from **dey-sub^h*- 'sky-storm'.³ *Zeus* and *Teššub* therefore share the same root **dey(w)-* 'day, daylight'. *Teššub* has counterparts in Urartian *Teiseba* and Kassite *Tišpak*.⁴ *Kronos* does not have a received and clear etymology, a link with PIE **ǵer-* 'old' is thinkable, admitting a transition through a language that devoices initials as in Greek *πύργος* 'tower' (< **bhṛǵh-*). *Kronos* (the 'old one') and *Kumarbi* (the 'hundred-years old') are therefore synonymous. *Zeus-Teššub* is Latin *Jove* the 'young' god. The preform of *Ouranos* is **owṛn-*, which in my opinion is a borrowing of Hurrian *hawurni* 'sky', as explained below in more detail.

In Latin, *Saturn* does not have a father and the Upper-Sky does not have a name, nor a ruling god. It is nevertheless hard to believe that people would not perceive that the stars and Milky Way are not on the same footing as bigger and mobile objects like the sun or the moon.

The structure of the cosmogony is therefore:

		color	Latin	Greek	Hurrian
Upper-Sky	stars	black	?	Ouranos	Alalu
Middle-Sky	sun, moon	red	Saturn	Kronos	Kumarbi
Lower-Sky	daylight	white	Jupiter	Zeus	Teššub

Each sky has a specific color. The Upper-Sky has the color of night: black. The Lower-Sky normally has the color of light: white.⁵ And, as a bit counter-intuitive as it might seem, the color of the Middle-Sky, which contains bright objects like the sun, the moon or Planet Venus, is red, the color of sunset and sunrise. Ancient Greeks held red to be a mixture of black and white. This belief does not reflect actual reality, which should be gray, but rather expresses the intermediary position of the Middle-Sky.⁶

¹ Cf. Latin *altus* 'high' and the late Greek equation *Alalu* = Ὑψιστος 'Highest'.

² It is common among German hurritologists to derive *Kumarbi* from a root **kum-* 'to build' (2012-BGDH, pp. 221–22). The main problem is that this verbal root **kum-* is a lexicographic fiction, nowhere attested. Besides, another word *kumti* 'tower' allegedly derived from the root **kum-* is in fact a borrowing of Semitic *qimtu* 'roof top', with inverted vowels as in *ZIZ* > Hurrian *izuzi* 'spelt'. The speculations proposed by the Germans are to be rejected.

³ Cf. for example, Lithuanian *siaũb-ti* 'to storm, rage'.

⁴ Further comparanda are Etruscan *Tinas* and LinearA *te-se-ba* in the Person name *su-ki-ri-Te-se-ba*, which is standard Hurrian *Šugri-Teššub*.

⁵ Haudry (Haudry, 2016, p. 93) mentions a Hittite ritual (*Hišuwa*) resorting to three colors: black, red and blue (instead of white).

⁶ See Haudry (Haudry, 2016, pp. 82–94) for an extensive discussion of the colors in cosmologies across Indo-European peoples.

Incidentally, black is also the color of earth, ἡ μελαίνα γῆ, but, in a cosmological context, the black color rather applies to the nocturnal sky.⁷

Additional remarks

Incidentally, Kumarbi also begets the Aranzah (Tiger) river, which may be an indication where the original Hurrian homeland lies. In historical times, Hurrians occupied a vast swath of land, from the Kizzuwadna to Nuzi, and in the upper-courses of the Euphrates and Khabur.

It can be noted that Kassite *Harbe*, the variant form of Hurrian *hawurni* 'sky', is equated to Sumerian *Enlil* 'the god of winds and atmosphere'. This raises an issue because *Harbe* and *Enlil* normally do not belong to the same layer. This contradiction can certainly be solved by the fact Sumerian does not seem to have a layered sky. *Enlil* can therefore be equated with any layer. The apparent contradiction only exists in the Indo-European point of view.

Besides, if a connection between Latin *caelum* 'sky' and the Hurrian Person Names *Kae-Teššub*, *Kae-Tilla* (NPN 222) is accepted, then the stem **ka(H)e-* is the name of the Lower-Sky, confirming that *hawurni* is the Upper-Sky, as suggested by the Greek borrowing.

Some people have tried to etymologize Greek οὐρανός as **wrs-an-*, suggesting that οὐρανός was a kind of reservoir of rain (drops). In the approach developed here, this etymology is impossible and fundamentally flawed, as rain does not fall from as high as the stars.

Hoffner (1990:41) claims that “Kumarbi is a netherworld god, whereas Teššub is a celestial god.” This conception is false. Both are celestial but belong to two different layers of the sky. Another point is that two Hurrian words have so far remained undistinguished. One is *kiyaši* 'sea' and the other is ^d*keyaše* 'lightning'.⁸ Tablets found in Meškene-Emar show that ^d*keyaše* is equated with the Elamite thunder-god (AN 218). As a result, ^d*keyaše* cannot be the same word as *kiyaši* 'sea' and probably means 'lightning'.

Last but not least, the three Skies of the cosmogony should not be confused with the famous tripartite socio-political ideology of Dumézil, which distinguishes three functions: sovereignty, warfare and wealth. Cosmogony and social organisation are two different topics.

The Upper-Sky – Heaven and stars

There is not much to say on the Upper-Sky as its ruling god is to a large extent a *Deus otiosus*, an idle god, who does not intervene much in the world as we know it.

Stars belong to this cosmogonic layer and were associated with fire: **H₂s-ter* < PIE **H₂es-* 'to burn, be hot'. The same idea surfaces in Semitic **kab-kab-* 'star' as noted by Bomhard (Bomhard, 2019). Another example is Kassite *dagaš* 'star', possibly from **d^heg^{h(w)}-* 'to burn'.

An interesting point is meteorites and stones fallen from the sky. To which layer of the sky do they belong?

In the Epic of Gilgameš, Enkidu is compared to a stone fallen from the sky. Gilgameš had a dream, which is explained to him by his mother (Tablet I lines 260–70):

260. Ninsun was clever, she was wise
 261. she knew everything, she said to Gilgameš:
 262. “The stars of Heaven appeared before you,

⁷ I here defer from the proposals of Haudry (Haudry, 2016), who does not seem to consider a black sky.

⁸ Cf. Fournet (2019-NGDH, pp. 95, 98).

263. like a lump of rock from the sky one of them fell toward you, [...]
 265. You picked it up and set it down at my feet,
 266. and I, I made it your equal, [...]
 270. His strength is as mighty as a lump of rock from the sky.⁹

This would suggest that objects fallen from the sky belong to the Upper-Sky, where stars belong. But the situation is not so clear, because the Akkadian tradition does not seem to separate the sky into several layers, in spite of having a plural word for 'sky' *šamšū*.

It appears that, in the Hurrian conception, celestial stones are an attribut of Ištar–Šauška, hence belong to the Middle-Sky. Here ^d*daya azzalli* 'attribut d'Ištar' in Laroche (1980-GDLLH, p. 67) needs to be discussed. Hurrian *azzalli* means 'stone'.¹⁰ The word ^d*daya azzalli*, which Laroche (1980-GDLLH) or Richter (2012-BGDH) left unglossed, probably means 'celestial stone, meteorite'. As Šauška belongs to the Middle-Sky, this logically means that the ^d*daya azzalli*, meteorite or lump of rock from the sky, also belongs to it.

The Middle-Sky – Sun, Moon and cyclical phenomena

The Middle-Sky contains cyclical bodies, most prominently: the sun, the moon, the planets Venus and Mars. Apart from being cyclical, these bodies have a period of disappearance and are not constantly visible, contrary to stars. This feature can easily be associated with seasons and plant growth in a Neolithic earth-tilling society.

Each of the bodies rules over a cyclical phenomenon. The sun over day and year, the moon over months, Venus over fertility, and less happily so, Mars over war.

A feature of the Hurrian cosmogony is that each of the celestial bodies is associated with a tutelary deity. In Greek and Latin, the sun and moon are their own deities.

Another difference between Hurrian versus Greek and Latin is the tendency to marry a god with a goddess. In Hurrian, this sort of marriages seems to be a fashion under Semitic influence. It would seem that the original cosmogony of the Indo-Europeans did not include such divine marriages. Hebat, the spouse of Teššub, is quite possibly from Semitic *ḥawwa(t)* 'life'. Several maidservants of Hebat also bear Semitic names, like *Daqita* 'the small one'. Another indication is the marriage of the Lower-Sky Zeus to the Middle-Sky Hērā, a structural oddity, which also exists between Jupiter and Iūnō, daughter of Saturn. Such marriages make sense only after Zeus began to cumulate features belonging to the Lower-Sky and the Middle-Sky.

The Middle-Sky – Sun and Moon

The number of roots used to name the sun is relatively limited. On the contrary the names of the moon are exceedingly numerous.

The Indo-European name of the sun: **seH₄w-l/n-* is linked to Hurrian *šawali*, Urartian *sali* 'year'. This root has Caucasian comparanda in Abkhaz **(a)ž^wə* 'year' and Nakh **šo* 'year'. Obviously, the sun is the basis for measuring years. Similarly, **dey(w)-* 'day, daylight' can be compared with Nakh **dē* (oblique **dēn-*) 'day'. It is unclear if Urartian *šiwini* 'sun' derives from **seH₄w-n-*. In all cases, Urartian *šiwini* is phonetically closer to **seH₄w-n-* than to Hurrian *Šimegi*, which derives from another root.

⁹ The translation follows George (George, 2003).

¹⁰ Cf. Fournet (Fournet, 2015, p. 44). Akkadian *kisir* 'lump of rock' is translated by Hurrian *azzalli*.

The Latin equivalent of the Middle-Sky god is *Sāturnus* (< **seH₄-t*-) from the same root as Latin *sōlis* 'sun'. The connections of Saturn with the sun and the winter solstice are obvious. The *Saturnalia*, a major religious festival in the Roman calendar, celebrated the harvest and sowing, and ran from December 17–23. Besides, the renewal of light and the coming of the new year was celebrated in the later Roman Empire at the *Dies Natalis* of *Sol Invictus*, the 'birthday of the unvanquished sun', on December 25.

Interestingly, Hoffner (Hoffner, 1990, p. 111) defines Kumarbi as “a grain deity”, consistent with the Latin god of agriculture *Sāturnus*. The equivalence is therefore strong.

The original name of the sun is kept in Hurrian *hami*, which translates Hittite *Šuwaliya* in KBo 32.13 Ro I 9. The original root is **H₂em-* 'sun', exemplified in Greek ἡμέρα or Armenian օր *ōr* 'day'. For unknown reasons, German hurritology does not seem to accept the obvious equation: *hami* = *Šuwaliya* of KBo 32.13 Ro I 9.¹¹ Neu (Neu, 1996, pp. 244–46) contortions and winces to deny the obvious at all cost ('*ham-* allerdings unbekannter Bedeutung').

The words *moon* and *month* are directly derived from **meH₁-*, itself a Kortlandt variant of **med-* 'to measure'. This is doubtless not the oldest root for 'moon'. It is unclear if Abkhaz *(*a*)*m(ā)za* (< ? **(a)maH₁-za*)¹² 'month, moon' is a cognate, presumably so. If accepted, it would suggest that the so-called Kortlandt effect (**d* ~ **H₁*) is much older than PIE itself, as it would exist in Abkhaz, a group that is a sister or maybe even a cousin of PIE.¹³ See below the discussion of Luvian *massan(i)-* 'god' and Hurrian *mišu*.

Latin has two words in relationship with the moon: *lūna* 'moon' and *īdus* (f. pl) 'mid-month'. Latin *lūna* has Indo-European comparanda and derives from **luk-sna* 'bright one'.¹⁴ Latin *īdus* is an isolated word, which may nevertheless be inherited. It has distant comparanda in Basque *ilhargi* 'moon (shine)¹⁵ and Hieroglyphic Egyptian *i'ḥ* (< **yid^hah*)¹⁶ 'moon'. These words are based on a scarcely attested Nostratic proto-root **yid^h-* 'full moon, mid-month', which seems to be the original name of the (full) moon and not an adjectival epithet like **luk-sna* 'bright one' as in PIE or **H₂erǵ-* 'shining' as in Basque.

The Hurrian word for 'moon' is not clear. *Kušuh* is the Moon-god, not the moon itself. The root **kuš-* is probably derived from a third synonymous adjective **k^wei-s/t-* 'bright, white'. This root has other derivatives in Hurrian like ^d*kušurni* 'attribute of goddesses'.

Greek Σελήνη is based on the noun σέλας 'light'.¹⁷

Finally, most Caucasian words for 'moon' are based on the root **bheH-* 'to shine, show up', which may have originally referred to the 'new moon'.¹⁸ Some languages have a back vowel *-o-*, some have *-a-*, Nakh has an alternation between *butt* and oblique *betta-*.

The Middle-Sky – Tutelary gods

In Hurrian, the sun *hami* and the moon **kuš-* have tutelary gods, respectively *Šimegi* and *Kušuh*. The word *Šimegi* can be understood as **dy-meǵh-i* 'master of day(light)'. Here, a major

¹¹ *Hami* is listed without translation in Richter (2012-BGDH, p. 123).

¹² With full-grade: Adyghe, Kabardian *māza*, with zero-grade: Abkhaz *á-mza*, Abaza *mzə*, Ubykh *məzá*, *á-mza*.

¹³ Most regrettably, current macro-comparative studies have embarked on a course, where Caucasian is deemed closer to Chinese than to Indo-European languages. This doubtless cannot be accepted as a working hypothesis.

¹⁴ Macro-comparison suggests that this root contains a particular lateral **ituk-*. See below **žuk*.

¹⁵ Basque *il* < **yid^h-* is regular.

¹⁶ Egyptian **d^h* > ^ɕ is regular.

¹⁷ It is not clear which god(dess) hides in Urartian <^dšⁱ-e-la-ar-di-e>, possibly a moon-god(dess).

¹⁸ Note that two languages have initial *m-*: Avar *moç*·, Chadakolob *moç* as in West Caucasian.

difference surfaces between Latin *Ju-piter* 'father of day(light)' and Hurrian **dy-meğh-i* 'master of day(light)'. *Jupiter* is the Latin equivalent of Zeus, the thunder-god, and should belong to the Lower-Sky. Hurrian *Šimegi* (< **dy-meğh-i*) 'master of day(light)' is different from Teššub and belongs to the Middle-Sky, where he rules over the sun *hami*. Latin fused Zeus, the thunder-god, of the Lower-Sky with the 'master, father of day(light)' of the Middle-Sky. *Jupiter* combines the Middle-Sky name with Lower-Sky attributes like thunder and day(light).

The differences can be shown in the following table:

		Greek	Hurrian	Latin
Year, sun	<i>*seH₄</i> - 'year'	Helios Kronos	(šawali) Kumarbi	Sōl Sātarnus
Sun, day	<i>*H₂em</i> - 'sun'	(ἡμέρα)	Ši-megi	Ju-piter
Day(light)	<i>*dey(w)</i> - 'day'	Zeus	Teššub	

Hurrian *šawali* and Greek ἡμέρα are not deified.

Noticeably, contrary to the usual warfare between Kronos–Kumarbi and Zeus–Teššub, the Romans had a peaceful conception of the relationship between Jupiter and Sātarnus. The former just prevailed over the latter, who is demoted to agriculture and periodic renewal. This probably reflects rearrangements of the Indo-European pantheon of Neolithic dating.

As mentioned before, the Lower-Sky Zeus is married to the Middle-Sky goddess Hērā, while Jupiter is married to Iūnō, daughter of Saturn. Iūnō can reasonably be compared to Latin *aevum* and Greek αἰών from **Hayw*- 'life, duration'. Hērā is similarly linked to ὄρα from **yoH₁r*- 'year, season, moment'. Both roots are unattested in Anatolian languages, but seem inherited. The meanings of the root are fully consistent with the cyclical features of the Middle-Sky.

The Middle-Sky – Planets Venus and Mars

Another major component of the Middle-Sky is the planets: Venus and Mars. Their respective tutelary deities in Hurrian are Šauška and the war-god Aštabi.

The assignment of the red Planet Mars to the war-god is certainly due to the color of blood. The theonym Aštabi is probably linked to Old Persian *aršta-bara* 'lance-bearer'. Another name for the war-god is Hurrian Tašmišu. Both equate Sumerian Ninurta. It seems that Tašmišu is the original Hurrian name while Aštabi is a Mittani-Aryan borrowing. Both are attested at Boğazköy, but only Aštabi is attested at Ugarit. Tašmišu is the son of Kumarbi, which makes him a god of the Middle-Sky.

Now, Tašmišu is the traditional reading of <^dta-aš-mi-šu->, but the sign *aš* can also be read *rum*. So, an alternative reading of Tašmišu is Tarummišu. Which is better? On account of Dadmiš, possibly the Goddess of Love, it would seem that *miš(u)* means 'god(dess)' or 'divine'. If compared to Luvian *māššan(i)*- 'god', then the root is **m(o)H₁-s*-. Hurrian *i* in zero-grade *miš(u)* is compellingly **H₁*. Luvian *māššan(i)*- 'god' is full-grade. Then, Taru(m) may mean 'burning', while Taš- 'gift' makes little sense. So our opinion is that the traditional reading Tašmišu is probably false, better is Tarummišu 'the burning god, the god of (war) fire'.

The case of Planet Venus is a bit more difficult, because two conceptions of womanhood need to be distinguished. Serious womanhood is about healing, protection, fertility, conjugality and victory. This form is represented by Šauška–Hērā–Iūnō. Frivolous womanhood is about love and sex. That latter form is represented by Aphrodite–Venus. The correct equivalent is probably

Hurrian Dadmiš, a somewhat obscure goddess, mostly attested in Syria. The word Dadmiš is probably derived from the Akkadian verb *dādu* 'to love'.

The traditional equation Ištar = Šauška is a bit misleading, because Ištar blurs the distinction between serious and frivolous womanhood, that exists between Hērā vs Aphrodite, and Iūnō vs Venus. Considerable interferences exist between the (North-West) Semitic cult of Ištar–Aštarte and the Indo-European goddesses. Interestingly, Plato, in his Symposium 180e, asserts that two entities are to be separated: *Aphrodite Ourania* 'Heavenly Aphrodite' and *Aphrodite Pandemos* 'Aphrodite for all the people'. This is precisely the distinction between serious and frivolous womanhood. Stricto sensu, Aphrodite–Venus is not a celestial goddess, but Šauška–Hērā–Iūnō definitely is.

The theonym Šauška is usually analyzed as meaning 'the swollen one', in relationship with child-bearing.

The Lower-Sky

The Lower-Sky is the atmosphere. Its most prominent god is the storm-god: Zeus–Teššub. As seen before, Teššub means **dey-sub-* 'sky-storm'. Zeus and Teššub share the same root **dey(w)-* 'day, daylight'. Teššub has counterparts in Urartian Teiseba and Kassite Tišpak.

Among the attributes of Teššub is ^d*keyaše* 'lightning, thunderbolt', which should not be confused with Hurrian *kiyaši* 'sea',¹⁹ another is ^d*Šertab-Šuruhi* 'Silver-light has gleamed'. The verb *šert-* means 'to gleam, be splendid'. The word *Šuruhi* can be compared with Indo-Aryan *śukrá-* 'white, pure'²⁰ and some Iranian words like *sukka-* 'clear'. These Indo-Iranian words do not seem to be inherited,²¹ so it is probable that Hurrian *Šuruhi* is not inherited either and is a Mittani-Aryan borrowing. Besides, the Hurrian word for 'silver': *išuhni, ušhuni* seems to be from the same source (**žu(r)k-*, **žuk-(r)-*).²² Hurrian does not admit voiced initials and has added a prosthetic vowel to the root.

Teššub has a vizier, classically called ^d*Impaluri*. In my opinion, this reading is false. <^d*im-pa-lu-ri*> should be read <^d*IM-pa-lu-ri*> where ^d*IM* is an ideogram which means Teššub. Correct is the name ^d*Teššub-aluri*. The morpheme (*H*)*aluri* also appears in *Hude-lluri* (vs *Hude*) a goddess of life and childbirth, and possibly also *Ube-lluri, Talmi-lluri*. Its exact meaning is unclear, seemingly 'servant', 'helper' or 'feeder'.

The emblematic animal of Zeus–Teššub is the eagle (fig. 1), in Hurrian Eribuški 'the golden eagle', in Greek ἀετός Διός.

Under Semitic influence, the storm-god Teššub has been assigned a spouse, Hebat, from Semitic *hawwa(t)* 'life'. But, contrary to the Sumerian pantheon, as a rule, divine marriages are not a feature of the Indo-European cosmogony.

In the Ancient Near-East, lions were associated with war. Piringal, literally the 'Great Lioness' to whom the Temple of Urkeš is dedicated, is a lion-goddess of war.

¹⁹ Hoffner (Hoffner, 1990, p. 42) considers that ^d*Šertab-Šuruhi* is the daughter of the Sea God [sic], and ^d*Impaluri* [sic] is the vizier of the Sea God [sic]. All this makes no sense, and results from an accumulation of confusions and misreadings.

²⁰ It can also be applied to soma and sperm. The variant *śukla-* can describe silver in Old Indian.

²¹ See Mayhofer's dictionaries of Indo-Aryan.

²² This root **žuk-* is possibly the Caucasian reflex of the Nostratic root **luk-* 'bright'. Cf. Lezgian **žag^war-*, Abkhaz *á-š^k^wa^k^wa*, Abaza *š^k^wa^k^wa* 'white'. A change **žauk-* > **žak^w-* seems to have occurred.



Figure 1. The eagle of Zeus riding a thunderbolt²³

Bulls are associated with the sun. There are two of them: Hurrian Tilla (< **dey-lla*) 'days' and Hurri 'night', consistent with the daily cycle of the sun. Laroche (1980-GDLLH) considers them to be the bulls of Teššub, but, logically, they should rather be the bulls of Šimegi. In Urartian art Teiseba is depicted standing on a bull. This is possibly an imitation of the Akkadian storm-god Adad, who is indeed represented standing on a bull. But this feature does not seem to occur with Teššub.

In the late Neolithic approach, the sun crosses the sky on a charriot. Obviously, this cannot be very ancient, as the Indo-European pantheon definitely predates the invention of charriots.

Distorsions of the original pantheon

As seen before, Latin fused Zeus, the thunder-god, of the Lower-Sky with the 'master, father of day(light)' of the Middle-Sky. *Jupiter* combines the Middle-Sky name with Lower-Sky attributes like thunder and day (light).



Figure 2. Teššub with a sword, an ax and a thunderbolt²⁴

²³https://en.wikipedia.org/wiki/Eagle_of_Zeus#/media/File:T%C3%A9tradrachme_du_royaume_Lagide_%C3%A0_l'effigie_de_Ptol%C3%A9m%C3%A9e.jpg (Available 26.12.2019)

Another distortion can be found in Indo-Iranian. The word *dyāu-* 'sky' is not a god, just a noun, contrary to Greek or Latin. It is the war-god Indra who combines the attributes of the thunder-god, in particular Indra's weapon, the *vajra*-sword, is obviously a metaphor of lightning. The *vajra*-diamond is also obviously linked to lightning. In other words, the Indo-Aryan pantheon blurs the difference between the Lower-Sky and the Middle-Sky.

The semantic connection is confirmed in Baltic: Lettish *milna* is the 'hammer of thunder', Old Prussian *mealde* is 'lightning', and Old Norse: *Mjöllni-r* is the hammer of Thor (= Zeus), *myln* is 'fire'. Besides, it can be noted that the Finnish borrowing *vasara* (< *vajra*-) means 'ax'. This is probably the original meaning of *vajra*- at a time when metallurgy did not exist yet.

What is more, the one who kills the Snake (Illuyanka) is Teššub in the Hurrian approach, but Indra in the Indo-Aryan approach, confirming that the war-god Indra has been reassigned a number of features and attributes originally belonging to the storm-god (fig. 2). In Greek, Zeus kills Typhon (Τυφάων or Τυφωεύς), which is consistent with Hurrian (fig. 3).



Figure 3. Zeus killing Typhon²⁵

Conclusions

In the paper, we surveyed the cosmogonies of several Indo-European peoples: Greek, Latin and Hurrian. It can be established that their original cosmogony involved three skies. An Upper-Sky with the stars, a Middle-Sky with cyclical bodies like the sun, the moon and Planets Venus and Mars, a Lower-Sky with the storm-god.

Some minor distortions can be observed where attributes of the storm-god are reassigned to deities of the Middle-Sky. They are quite easy to detect.

The principle of divine marriages was probably absent in the original pantheon and results from Semitic influences. The Semitic cult of Ištar also caused some confusion between serious womanhood as per Šauška–Hērā–Iūnō and frivolous womanhood as per Aphrodite–Venus.

²⁴ https://commons.wikimedia.org/wiki/File:Weather_God.jpg (Available 26.12.2019)

²⁵ <http://corpussignorum.org/dictionary/Dict/image/Zeus2.jpg> (Available 26.12.2019)

Appendix 1 – The Euro-Caucasic family

A word needs to be said on the miserable state of present-day (macro-)comparative studies.

As the paper shows, Hurrian is intimately linked to Greek and Latin, lexically and culturally.

So far, Indo-Europeanists have refused to acknowledge my claim that Hurrian and Urartian are the closest relatives of Anatolian and Post-Anatolian Indo-European languages, a claim that began to be put to paper in 2010 in a coauthored draft with Allan R. Bomhard, but is several years older than 2010 as far as I am concerned.

Unfortunately, current Indo-European Studies more or less amount to a scientific fraud, where Improved-Proto-Sanskrit, the model inherited from the 19th century, is supposed to equate Proto-Indo-European. One century after the realization that Hittite was an Indo-European language, there still exists no reconstruction of PIE. In addition, etymological dictionaries are based on a flawed system with only three laryngeals when four are (obviously...) necessary.

Besides, Improved-Proto-Sanskrit, as it currently stands, is a hotchpotch of genuine PIE, Caucasian and Kartvelian words, that is in urgent need of being sorted out.

Basque and Caucasian have been rightly held to be related. Though Bengtson's ideas cannot all be accepted, enough good comparanda are already assembled to make sure Basque is a kind of Caucasian language.

Now, undoubtedly, the most demented idea currently propagated by some comparatists is the claim that Caucasian would be closer to Chinese than to PIE. There is on the contrary no doubt that Caucasian (together with Basque) is a close relative of PIE. Though related to PIE, Uralic is not the closest relative of PIE.

The following list of words and roots bears testimony to the fact PIE and Caucasian are intimately related. There are nevertheless some clear isoglosses between both groups: Caucasian has a stressed *a*-prefix and the reflex of the Nostratic lateral fricative **ś* is *ž*, not *l* as in PIE.

The structure of the Euro-Caucasic family is as follows:

Branch A – Anatolic (no *a*-prefix, Nostratic **ś*, **l* > *l*)

↳ A1 – Western Anatolic (aka orthodox Indo-European) (P1 sg is **H₁e-ǵ-*)

↳ Anatolian: Hittite, Luvian,

↳ Post-Anatolian: Latin, Greek, etc. (heavily mixed with Caucasian words)

↳ A2 – Eastern Anatolic (P1 sg is **H₁e-s-*)

↳ Hurrian, Urartian, Kassite, Carian²⁶

↳ (Possibly Etruscan)

↳ Nakh (Caucasified, though not Caucasian)

Branch B – Caucasian (*a*-prefix)

↳ Caucasian (without Nakh) (Nostratic **ś* > *ž*, **l* > *l*)

↳ NW Caucasian

↳ NE Caucasian

↳ Basque (Nostratic **ś*, **l* > *z*)

↳ Numerous substratic words in Post-Anatolian languages

²⁶ NB: the pseudo-decipherment of Carian alphabets cannot be accepted. This is another demented claim. Carian is to a large extent an offshore dialect of Hurrian.

NB: Kartvelian is a sister of the Euro-Caucasic family, rather than a third branch. It appears that cognates are quite scarce between Euro-Caucasic and Kartvelian.

Appendix 2 – List of Euro-Caucasic roots and words

Appendix 2 lists the words and cognates discussed in the paper.

**H₄el-* 'high', (derived meaning) 'god of the Upper-Sky'

PIE ↪ Post-Anatolian: Latin *altus* 'high', Middle-Irish *alt* 'height'

HU ↪ Hurrian *Alalu* 'the ruling god of the Upper-Sky', Urartian *alawi(ni)* 'lord'

**b^heH_x-* 'to shine, appear', (derived meaning) 'moon'

PIE ↪ Post-Anatolian **bhā-*: Greek φαίνω 'to shine'

HU ↪ Nakh **butt* 'moon', oblique **betta-*

CAU ↪ Avaro-Andian **borç:i*, Tsezian **boc-*, Khinalug *waç* 'moon', Lak *barz*, Dargwa **bac:*, Lezgian **waz* 'moon, month'.

**dey(w)-* 'day(light)', (derived meaning) 'god of the Lower-Sky'

PIE ↪ Anatolian: Hittite *šiu-š* 'god', *šiwatt-* 'day'(with spirantized **d* > *š*)

↪ Post-Anatolian: Latin *deus* 'god', *diēs* 'day', Greek Zeus, etc.

HU ↪ Hurrian *Teššub*, Urartian *Teiseba*, Kassite *Tišpak* (< **dey-s(e)ub^h-*) 'the storm-god of the Lower-Sky', ^d*Teššub-aluri* 'vizier of Teššub', *Šimegi* (< **dy-meğh-i*) 'master of day(light)', Tilla (< **dey-lla*) 'days'

↪ Etruscan *Tinas*

↪ Nakh: Chechen *de*, Inguš *di*, Bacbi *de* 'day', oblique: Chechen *dīna-*, Inguš *deno-*, Bacbi *din-a²* 'every day', Chechen *dēla*, Ingush *dāla*, Batsbi *dal*, *dalē* 'god'

**d^heg^{h(w)}-* 'to burn', (derived meaning) 'star'²⁷

PIE ↪ Post-Anatolian **d^heg^{h(w)}-* 'to burn', Toch. A, B *tsāk-* 'to burn', *tsāk-* 'to illuminate'

HU ↪ Kassite *dagaš* 'star'

**gh^weyH₄-* 'shining', (derived meaning) 'the Lower-Sky'

PIE ↪ Post-Anatolian: Slavic **gvězda* 'star', Greek φαίδρός 'bright, beaming'²⁸

HU ↪ Hurrian Person Names *Kae-Teššub*, *Kae-Tilla*, Hurrian ^d*keyaše* 'lightning'

↪ Etruscan > Latin *caelum* 'sky'

**H₂em-* 'sun', (derived meaning) 'day'

PIE ↪ Post-Anatolian: Greek ἡμέρα or Armenian օր *ōr* 'day'

HU ↪ Hurrian *hami* 'sun'

**H₂erğ-* 'shining', (derived meaning) 'moon', 'silver'

PIE ↪ Anatolian: Hittite *harki-* 'white, clear'

↪ Post-Anatolian: **arg-* stem for 'silver'

CAU ↪ Basque *il-hargi* 'moon (shine)'

**H₂ey-* '(life) time', (derived meaning) 'Tūnō'

²⁷ Kartvelian *dğ-es* and Substratic Germanic **dağ-* 'day' probably belong here as well.

²⁸ Baltic **žwaižd-* 'star' is irregular as regards tone and initial.

- PIE ↪ Post-Anatolian: Greek αἰών 'period, lifetime', Latin *Iūnō* 'daughter of Saturn'
 HU ↪ (?) Nakh **χan* 'time, age', obl. Chechen *χēna-*, Ingush *χano*, Bacbi *χani-* (< **H₂eyn-*)
- **k̑m-* 'palm of hand', (derived meaning) 'one hundred'²⁹
 PIE ↪ Post-Anatolian: **k̑m-tom* 'one hundred'
 HU ↪ Hurrian *Kumarbi* (< **k̑m-arbi*) 'the ruling god of the Middle-Sky (lit. the hundred-year-old god)'
 CAU ↪ Chamalal *q:anta* 'palm of hand'³⁰
- **kow-* 'high', (derived meaning) 'Upper-Sky'
 PIE ↪ Post-Anatolian: Germanic **hau-ǵa-* 'high', Tocharian A *koc*, B *kauc* (PT **keuc*) 'high up, above'
 HU ↪ Hurrian *hawurni* (< **kow-ryn-*), Kassite *Harbe* 'the Upper-Sky'
 ↪ borrowed in Greek *Ouranos*, and Latin *Uranus* 'the Upper-Sky'
- **k^wei-s/t/n-* 'bright, white', (derived meaning) 'moon'
 PIE ↪ Post-Anatolian: Germanic **hwīt-* 'white'
 HU ↪ Hurrian *Kušuh* 'the Moon-god', ^d*kušurni* 'attribute of goddesses'
 CAU ↪ (?) Avaro-Andian **k^wani* 'light, torch', Tsezian **k^wã* (obl. **kana-*) 'torch'
- **luk-* 'bright', (derived meaning) 'moon', 'silver'
 PIE ↪ Post-Anatolian: **luk-sna* 'moon', **leuk-o-* 'white'
 CAU ↪ *žuk-* 'bright': Lezgian **žag^war-*, Abkhaz *á-šk^waḱ^wa*, Abaza *šk^waḱ^wa* 'white'³¹
 ↪ borrowed in Hurrian as *išuhni*, *ušhuni* 'silver', ^d*Šertab-Šuruhi*
 ↪ borrowed in Indo-Iranian as *śukrá-*, *sukka-* 'white, pure'
- **med-*, **meH₁-* 'to measure', (derived meaning) 'moon, month'
 **m(o)H₁-s-* 'god of the Middle-Sky'
 PIE ↪ Anatolian: Luvian *massan(i)-* 'god'
 ↪ Post-Anatolian: **meH₁-n-* 'moon, month'
 HU ↪ Hurrian *miš(u)-* 'god' 'god(dess)' in Dad-miš and Tarum-mišu
 CAU ↪ With full-grade: Adyghe, Kabardian *māza*, with zero-grade: Abkhaz *á-mza*, Abaza *mzə*, Ubykh *məzǎ*, *á-mza* 'month, moon' (< ? **m(o)H₁-s-*)
- **meǵh-* 'power, master'
 PIE Post-Anatolian: **meǵh-*, also **megh-* 'to be able'
 HU ↪ *Šimegi* (< **dy-meǵh-i*) 'master of day(light)'
- **par-*, *pir-* 'lightning', (derived meaning) 'thunder-god'
 PIE ↪ (? Substratic³²) Slavic **Perūn*, Baltic *Perkūnas* 'thunder-god', Old Indian *Parjanya* 'rain god', Old Norse *Fjörgyn* 'the mother of the thunder-god Thor'³³

²⁹ Cf. Uralic **kāme-(ne)* 'palm of hand', Mordvin *kemen* 'ten'.

³⁰ This word interferes with **qa^ʔt-* 'hand'.

³¹ Cf. Kartvelian *šuk* 'light'.

³² The geographic distribution is quite unbalanced. It is unclear to which extent the comparanda are inherited.

³³ Cf. Erzya Mordvin thunder god *Pur'gine-paz* 'thunder-god'.

CAU ↪ Avaro-Andian **piri*, Tsezian **pir*, Lak *parannu*, Akusha *palr*, Lezgian **par-/rap-* 'lightning'

**seH_{4u}*- 'year', (derived meaning) 'sun'

PIE ↪ Anatolian: Hittite *Šuwaliya* 'sun'

↪ Post-Anatolian: **seH_{4w-l/n-}* 'sun'

↪ Post-Anatolian: Latin *Sāturnus* (< **seH_{4-t-}*) 'the ruling god of the Middle-Sky'

HU ↪ Hurrian *šawali*, Urartian *sali* 'year', Urartian *šiwini* 'sun'

↪ Nakh: **šo* 'year', oblique: Chechen *šera-*, Inguš *šero-*, Bacbi *šari-*

CAU ↪ Abkhaz *(*a*)ž^wə 'year'

**sel-* 'light', (derived meaning) 'moon'

PIE ↪ Post-Anatolian: Greek Σελήνη 'moon', σέλας 'light'

HU ↪ (?) Urartian <^dš*i-e-la-ar-di-e*> 'an unclear god(dess)'

↪ (?) Nakh: Chechen *ša* 'light', oblique: *šin-* (without *l*)

CAU ↪ Dargwa **š:ala* 'light'

**seub^h*- 'storm'

PIE ↪ Post-Anatolian: *siaũb-ti* 'to storm, rage'

HU ↪ Hurro-Urartian: Hurrian *Teššub*, Urartian *Teiseba*, Kassite *Tišpak* (< **dey-s(e)ub^h*-) 'the storm-god of the Lower-Sky'

**toH_{3-i-}* 'to burn', (derived meaning) 'meteorite, star'

PIE ↪ Post-Anatolian: Substratic (popular) Latin *tītiō* 'burning brand'

HU ↪ Hurrian ^d*daya azzalli* 'meteorite'

↪ Nakh: Batsbi *t'ejrī* 'star'

**yeH_{1-r-}* 'year, season, moment'

PIE ↪ Post-Anatolian: Greek ὄρα, ἦρα

CAU ↪ (?) Lak *arB* 'prime of life', Dargwa *arB* 'age'

↪ (?) Basque *urte* 'year'

**yd^h*- 'full moon, mid-month'

PIE ↪ Post-Anatolian: Latin *īdus* (f. pl) 'mid-month'

CAU ↪ Basque *il-hargi* 'moon (shine)'

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