Sino-Uralic Etymology for 'Jupiter, Year' Supported by Rhyme Correspondence

Jingyi Gao

Beijing International Studies University, China; E-mail: gao.jingyi@bisu.edu.cn
Institute of the Estonian Language, Tallinn, Estonia; E-mail: jingyi.gao@eki.ee
University of Tartu, Estonia; E-mail: jingyi.gao@ut.ee

Abstract

Using etymological methods, the present study has identified seven Sinitic and Uralic shared etymologies (etyma). Three of them form a rhyme correspondence. Two of them form an onset correspondence. Four of them form another rhyme correspondence. These regular sound changes validate the genetic connection between Sinitic and Uralic. The Sino-Uralic etymology (etymon) for 'Jupiter, year' is among these etyma. It is demonstrated that this term should be aboriginal in Sino-Uralic languages.

Keywords: etymology, rhyme correspondence, Sinitic, Uralic, Sino-Uralic, Indo-European, Jupiter, year, wether, wet, water, mead.

Introduction

The “Finno-Ugric” term for 'year' (equivalents e.g. Finnish vuosi/vuote- 'year'; Estonian voos/voo 'annual harvest'; Livonian ūgri 'spring rye'; Veps vož 'year'; Votic vōsi 'year'; North Sami -vuohda 'hood'; Komi/Zyrian vo 'year'; Khanty/Ostyak allot 'year') has no cognate in Samoyedic languages, therefore it has been previously claimed a loanword from Indo-European (e.g. Sammallahi, 1998, p. 127; Koivulehto, 1999, p. 218). The present study finds that this “Finno-Ugric” term has cognates in Sinitic languages (which mean 'Jupiter, year') supported by a rhyme correspondence consisting of three etyma and an onset correspondence consisting of two etyma; therefore this term must be aboriginal in Sino-Uralic languages.

Gao (e.g. 2005, 2014b, 2019; Gāo, 2008) detected and identified Sinitic and Uralic shared etyma, and has solely researched Sinitic and Uralic shared etyma for more than a decade. We could infer a general skepticism about this approach. Several unsound language comparisons, e.g. Finnish with Basque, Finnish with Dravidian, Proto-Uralic with Proto-Indo-European, have become tedious. It was difficult to clarify how the Sino-Uralic comparison is extraordinarily significant. Gao (2014b) turned the focus to a solid demonstration of regular sound correspondences (rhyme and onset correspondences) between Sinitic and Uralic, and included long discussions on the methodology. In light of this, one can realize that the Sino-Uralic etymological studies are distinguished from those unsound language comparisons. The general direction of Sino-Uralic affinity studies should be acknowledged.
A rhyme correspondence is a strict and composite rule of interlinguistic sound correlations. A rhyme correspondence achieves that not only a single phoneme but also a composite rhyme (the -VCv part of a CVCv morpheme) is consistently correlated among related language varieties. The first rhyme correspondences between the Sinitic and Uralic languages have been demonstrated on the example of the Finnish -ala and -aja rhymes with ten etyma (Gao, 2014b). A total of ten rhyme correspondences with 32 etyma has been published (Gao, 2019a). Another rhyme correspondence with five etyma has been added (Gao, 2019b). The present study adds two rhyme correspondences with seven etyma.

Materials and methods

The Sinitic language family is compared to Uralic language family.

The Sinitic etyma are guided by Chinese etyma (DOMs) which are historically attested glyphs. Their historical glosses are cited from the first two Chinese classical dictionaries (121-SW; 543-YP). Their historical phonological features are cited from the work 1161-YJ. Their attested equivalents including contemporary forms and glosses are represented by Beijing Yan (Mandarin) (written in Hanyu Pinyin including non-simplified forms), Guangzhou Yue (Cantonese) (written in Jyutping), Taipei Min (Minnan) (written in Tâi-lô), Japanese Go-on and Kan-on (written in Hepburn). English glosses are made in the present study. Historically attested Old Chinese (OC) rhymes of the etyma are given according to Wáng (1980). Reconstructed phonetic values of the rhymes are made in the present study.

The Uralic etyma are based on the relevant etymological dictionaries 1988-UEW and 2001-SSA. Their attested equivalents including contemporary forms and glosses are represented by Estonian, Finnish, Sami\Lappish North/Lule/Inari/Skolt/Kildin (equivalents up to 1989-YSaS; North Sami forms are adjusted according to 1989-SSS), Mordvin, Mari\Cheremis, Udmurt\Votyak, Komi\Zyrian, Khanty\Ostyak, Mansi\Vogul, Hungarian, Nenets\Yurak, Enets\Yen, Nganasan\Tawgi, Selkup and Kamass. Non-English glosses are translated to English in the present study. Some modifications within Uralic etyma (adding or deleting equivalents) are made and remarked in the present study. Refutations of previously suggested etymological equivalents are given in footnotes.

Etymological equivalents in some other languages (mainly Indo-European, Tibeto-Burman, Manchu-Tungus suggested by other scholars) are checked according to the relevant works 1959-IEW, 1988-UEW, 1996-CV5ST, 2001-SSA, 2007-EDOC and 2008-NIL.

Reconstructed forms are added only for reference reasons. All the attested forms are compared instead of trusting the phonetic and semantic details of reconstructions, because the reconstructions are subject to changes depending on (newly compared) attested linguistic data. Two Old Chinese reconstructions, OC-W according to Wáng (1980) and OC-Z according to Zhèng-zhāng (2013), are listed. Other reconstructions are cited from the direct references. Double quotation marks (""") are added when a notion or a reconstruction is not agreed.

Proto-Sinitic, also known as Proto-Chinese, cannot be compared because it is only a theoretical notion without reconstructed results. “Proto-Sino-Tibetan” cannot be compared because it is a hypothetical notion without a sufficient amount of etyma representing a sufficient number of languages. Moreover, the Sino-Tibetan hypothesis has been successively criticized (Miller, 1974; Beckwith, 2002, 2006, 2008; Hé, 2004; Guō, 2010, p. 21; Zhāng, 2012). Besides, there are hypotheses for the multiple origins of Sinitic (Lí, 1990; Schuessler, 2003).
Etymological equivalents are given in orthographies or transcriptions (for Uralic, mainly the Uralic Phonetic Alphabets). Equivalents in Western alphabets are given in boldface if they are found in official languages covered by ISO 639-1. Equivalents in Roman scripts are given in italic. If a given word is longer than one morpheme, the targeted morpheme is underlined (if certain). In Uralic, conditionally apocoped phonemes are given in uppercase. A cross sign (†) indicates that its target is archaic and outdated. Arrows (→, ←) indicate non-genetic diffusions of terms (called loanwords by Western linguistics). In successive data, dialectal and authorial variants are separated by a slash (/); grammatical variants are separated by a backslash (\); while lexical variants are separated by a comma (,).

The methods follow traditional etymology (cf. Rask, 1818) and renewed etymology (cf. Gao, 2014a, 2014b, 2017, 2019a, 2019b). This study includes also methods of traditional Sinogrammatology (cf. 121-SW, 543-YP, 1978-1982-HJ, 1989-LZ) and Sino-phonology (cf. 1008-GY, 1161-YJ) which are ancient technologies.

**Results and discussion**

#1【歳】『歳文(121-SW): 木星也(Jupiter); 玉篇(543-YP): 载名(name of year); 韻鏡(1161-YJ): 外轉第十六合等去聲齿音[左]清(outbound, 16th final, labialized+, 4th division, C tone, dental initial [fricative+ voiced-); Mandarin suī (suéi) 'year-old', suī-xīng (suéi-xīng) 'year-star (Jupiter)'; Cantonese seoi3 'year-old', seoi3-sing1 'year-star (Jupiter)'; Minnan suè-huēlêhê 'year-old', suē-sing 'year-star (Jupiter)'; Japanese Go-on sai; Kan-on sei;{OC rhyme 月韻 *-ta; OC-W *siuat; OC-Z **sqʰʷads”} is compared (Gāo 2008, p. 206) to the Uralic etymon after the equivalents: Estonian voosvoo 'annual harvest', tänava ‘this year’; Finnish vuosivuote- ‘year'; SamiLappish -vuolta/-vuolta/-/-/-/- ‘hood/period'; UdmurtVotyak va-puŋ 'time, lifetime, age’; KomiZyrian vo 'year'; Khanty\Ostyak allotlx 'year'; {“Proto-Finno-Ugric” *oðel*bőe 'year' (1988-UEW, p. 335)}. {Proto-Sino-Uralic *h*ętāS 'Jupiter, year’}

This etymon has been identified (since Schrader, 1907, vol. 2, p. 525: only Finnish ~ Veps ~ Khanty\Ostyak ~ Proto-Indo-European *vet-, ut-, veto) in Indo-European languages: {Germanic: Danish vedder 'ram'; Swedish vädur 'ram'; Norwegian vaer 'ram'; Icelandic veður 'ram'; Old Norse veðr 'ram'; English wether; Old English weper 'wether'; Dutch weer 'wether'; Old Low German wuthar 'ram'; German Widder 'ram'; Old High German widar 'ram'; Gothic wiprus 'yearling lamb'}; {Baltic: Latvian vecs 'old'; Lithuanian vėtusas '†old'}; {Slavic: Czech vetchy 'decrepit'; Slovak vetchý 'decrepit'; Polish wiotki 'flabby'; Russian vetchii (vethii) ‘†old’; Ukrainian вetchiї (vethiij) ‘†old’; Bulgarian вест (veht) ‘old’; Serbo-Croatian бěтак/вётах ‘†old’; Old Church Slavonic ветчъ (vetxu) ‘†old’}; {Italic: Latin vetus ‘old’; Italian vecchio ‘old’; Spanish viejo ‘old’; Romanian biet ‘poor’}; {Albanian vjet ‘year’; vjet ‘last year’; Ancient Greek ἔτος (étopos) ‘year’; {Anatolian: Hittite witta ‘year’; Luwian uššiš ‘year’}; {Indo-Iranian: Sanskrit वट्स vatsá, ‘calf, son, year’; Ossetian bæc (vas) ‘calf’}; {Proto-Indo-European *yɛet- ‘year’ (1959-IEW, p. 1175)}. This etymon has not been identified in other languages.¹ {?Proto-Sino-Uralo-Indo-European *h*ętāS. See the overview section for this question.}

¹ Refutation: Previously claimed (Mei, 1979, p. 117) etymological equivalents after Written Tibetan skyod 'to go, walk; go down, set' are rejected due to phonetic and semantic inconsistencies. Previously claimed (2007-EDOC, p. 485) etymological equivalents after Proto-Tai *nuap; Siamese ທໍ້บาล 'year' are rejected due to phonetic and semantic inconsistencies.
This etymon must be aboriginal in Sino-Uralic languages. There are two main reasons:

(1) The planet Jupiter was used to indicate years in ancient China, because it is located between different stars by year. The expression of year in Old Chinese is 【歳在……】'Jupiter is at …… (location of stars)'. This DOM is already attested in the Oracle Bone Script.

(Figure 1) (1989-LZ, p. 917: 1978-1982-HJ, #13475). The glyph shows a toolbar pointing between stars.

Figure 1. Attested form of 【歳】 in the Oracle Bone Script.

(2) It is a certain Sino-Uralic etymon supported by a rhyme correspondence consisting of three etyma (see Table 1 in the next section). The following etyma are studied in order to form a rhyme correspondence with the etymon #1.

#2) 【兑】 〖説文(121-SW): 說也(‘explain’); 玉篇(543-YP): 說也(‘explain’); 懸鏡(1161-YJ): [兑]外轉第二合等入聲舌音濁(16th final, labialized+, 1st division, C tone, alveolar initial voiced+); Mandarin duì (duèi) ‘correspond’; Cantonese deoi3 ‘correspond’; Minnan tsêltua ‘correspond’; Japanese Go-on daï; Kan-on tei; {OC rhyme 月韻 *-ta; OC-W *duat; OC-Z “*l’o:ds”} ] is compared (first publication) to the Uralic etymology after the equivalents: Estonian tõstõe- ‘true, truth’, tõdeťõe- ‘truth’; Finnish tösstäte- ‘truth’; Sami\Lappish duohaltuohaltuotaluotälä ‘fact’; (“Proto-Finn-Lappic” *tote (Sammallahti, 1998, p. 239)). This etymon has not been identified in other languages. 3) [Proto-Sino-Uralic *d*otaS ‘correspond’]

#3) 【沫】 〖説文(121-SW): 水出蜀西徼東南入江(‘name of river’); 玉篇(543-YP): 水名又水浮沫也(‘name of river, foam’); 懸鏡(1161-YJ): [沫]外轉第二合等入聲舌音清濁(24th final, labialized+, 1st division, D tone, labial initial voiced+); Mandarin mò (muè) ‘foam’; Cantonese mut3 ‘foam’; Minnan buâltbuáh ‘foam’; Japanese Go-on machilatsu; Kan-on batsu; {OC rhyme 月韻 *-ta; OC-W *mat; OC-Z *ma.d} ]] is compared (first publication) to the Uralic etymology after the equivalents: Sami\Lappish muohaltuohaltuotaluotälä ‘fact’; (“Proto-Lappic *motti (Sammallahti, 1998, p. 225)). This etymon has not been identified in other languages. 4) [Proto-Sino-Uralic *mb*otaS ‘foam, ice powder’]

---

2 Oracle Bone Script is the unearthed writing system of the Shang Empire (c.a. 1600–1046 B.C.E). It was recognized as being ancient Chinese writing by Wang Yi-roung 王懿荣 in 1899. Lü E 利器 compiled and published the first collection of 1,058 rubbings including some interpretations of some unearthed scripts in 1903. In English, it was introduced as “inscriptions upon bone and tortoise shell” by Frank H. Chalfant (1906, p. 30). The largest collection of 41,956 rubbings is 1978-1982-HJ. The primary academic reference book is 1989-LZ which sorts lexical terms and identifies their graphic-etymological equations to transmitted Chinese etyma (DOMs).


4 Refutation: Previously claimed (Sammallahti, 1998, p. 127, 255; Koponen, 2005, p. 227; Koivulehto, 2006, p. 185) etymological equivalents after Proto-Balto-Slavic *mat-; Russian *moru (mori) ‘to reel, to wind’ are rejected due to semantic inconsistencies. Previously claimed (Koponen, 2005, p. 227; Koivulehto, 2006, p. 185) etymological equivalents after Estonian mõtma ‘to bury’ are rejected due to phonetic (according to the rhyme correspondence Re#2020GaoAt1, its Estonian equivalent is expected to be mõsi or mõsi, but negative result) and semantic inconsistencies.
Since the etymon #1 involves compared onsets with different places of articulation in Sinitic and Uralic, the following etymon is studied in order to form an onset correspondence with the etymon #1.

#4) [水] 『說文(121-SW): 象眾水並流中有微陽之息也('water'); 玉篇(543-YP): 流津也('river'); 韻鏡(1161-YJ): 內轉第七合三等齒音[左]清(inbound, 7th final, labialized+), 3rd division, dental initial [fricative+] voiced-); Mandarin shuí (ｓuíǐ) 'water'; Cantonese seoi2 'water'; Minnan suîlsùi 'water'; Japanese Go-on sui; Kan-on sui; {OC rhyme 腦韻 *-ọ; OC-W *cèi; OC-Z "*qʰʷlji̯l?"} is compared (Gao, 2005, p. 73; Găo, 2008, p. 204) to the Uralic etymon after the equivalents: Estonian vesîve- 'water'; Finnish vesîve- 'water'; Mordvin vedîvâd 'water'; Mari/Cheremis wat/wiit 'water'; Udmurt\Votyak vu/vi 'water'; Komì/Zyrian va 'water'; Mansî/Vogul üti/üüt/üvit 'water'; Hungarian víz 'water'; Neten\Yurak ji?hit 'water'; Enets\Yen bi? 'water'; Ngañasan\Tawgi bê? 'water'; Selkup yllüllüöt 'water'; Kamass bu 'water'; {Proto-Uralic *weti 'water' (1988-UEW, p. 570)). {Proto-Sino-Uralic *h=ɛðɔX 'water'}

This etymon has also been identified (since Moller, 1975, p. 39, 164: only Estonian ~ Finnish ~ Swedish ~ German ~ Phrygian 'water') in Indo-European languages: {Germanic: Danish viede 'wetness, to wet', vød 'water'; Swedish vät 'wetness, to wet', vät 'water', vatten 'water'; Norwegian vete 'wetness, to wet', vät 'water', vann 'water'; Icelandic veta 'wetness, to wet, votur 'water', vatn 'water'; Old Norse veta 'wetness, to wet, vär 'water'; vam 'water'; English wet, water; Old English wētan 'to wet, wet 'water', water 'water'; Dutch water 'water'; Old Low German water 'water'; German Wasser 'water'; Old High German wazzar 'water'; Gothic wato 'river'}; {Slavic: Czech voda 'water'; Slovak voda 'water'; Russian voda 'water'; Russian вода (voda) 'water'; Belarusian вадá (vadá) 'water'; Ukrainian водá (vodá) 'water'; Bulgarian вода (voda) 'water'; Serbo-Croatian boda/voda 'water'; Slovene voda 'water'; Old Church Slavonic вода (voda) 'water'}; {Italic: Latin unda 'wave'; Italian onda 'wave'; French onde 'wave'; Spanish onda 'wave'; Portuguese onda 'wave'; Albanian уджé 'water'; Greek υδόορ (yodor) 'water'; Ancient Greek υδόορ (húdôr) 'water'; Phrygian βέου (bêdu) 'water'; {Anatolian: Hittite waatar 'water'; Luwian widu- 'water'; wärñas 'water'}; {Old] Armenian քղն (get) 'river'; Sanskrit युद्ध (udrā) 'water'; उदन (udān) 'water, wave'; Tocharian-A wär 'water'; Tocharian-B war 'water'; {Proto-Indo-European *yed- "swell" (2008-NIL, p. 707).} {?Proto-Sino-Uralo-Indo-European *h=ɛðɔX-n > h=ɛðɔX. See the overview section for this question.}

This etymon has also been identified (Ilich-Svitych, 1967, p. 334) in Manchu-Tungus languages: Orochi udun 'rain'; Evenki udun 'rain'; Solon юдь 'rain'; Even udun 'rain'; {Proto-Manchu-Tungus *udun 'rain (with wind)' (1977-SSTÅ, p. 248).} {= *h=ɛðɔX-n}

The following etyma are studied in order to form a rhyme correspondence with the etymon #4.

#5) [指] 『說文(121-SW): 手指也('finger'); 玉篇(543-YP): 手指也('finger'); 韻鏡(1161-YJ): [旨]內轉第六開三等上聲齒音清(inbound, 6th final, labialized-), 3rd division, B tone, dental initial voiced-); Mandarin zhǐ (žǐ) 'finger, indicate'; Cantonese zi2 'finger, indicate'; Minnan tsilki 'finger, indicate'; Japanese Go-on shi; Kan-on shi; {OC rhyme 爰韻 *-ọ; OC-W *teiei; OC-Z

5 Refutation: Previously claimed (1996-CVST) etymological equivalents after Kachin madý 'be wet'; Lushai tuî 'water' are rejected due to phonetic inconsistencies. Previously claimed (2007-EDOC, p. 475) etymological equivalents after Proto-Tibeto-Burman *hvøjy; Jingpho lu̯i̯ 'to flow'; Lushai lau ̂< lu̯i; Tiddim lu̯i̯ < lu̯i̯ 'stream, river'; Old Mon  lwọ; Kmer luj 'float, drift'; Vietnamese lọy 'swim' are rejected due to phonetic inconsistencies. Previously claimed (Ilich-Svitych, 1967, c. 334) etymological equivalents after Proto-Dravidian ṣvēd- 'water', Proto-Chukchee-Kamchatkan ṣēn 'to drip', Proto-Korean ṣirin 'heavy rain' are rejected due to phonetic inconsistencies.

5 Refutation: Previously claimed (1996-CVST) etymological equivalents after Kachin madý 'be wet'; Lushai tuî 'water' are rejected due to phonetic inconsistencies. Previously claimed (2007-EDOC, p. 475) etymological equivalents after Proto-Tibeto-Burman *hvøjy; Jingpho lu̯i̯ 'to flow'; Lushai lau ̂< lu̯i; Tiddim lu̯i̯ < lu̯i̯ 'stream, river'; Old Mon  lwọ; Kmer luj 'float, drift'; Vietnamese lọy 'swim' are rejected due to phonetic inconsistencies. Previously claimed (Ilich-Svitych, 1967, c. 334) etymological equivalents after Proto-Dravidian ṣvēd- 'water', Proto-Chukchee-Kamchatkan ṣēn 'to drip', Proto-Korean ṣirin 'heavy rain' are rejected due to phonetic inconsistencies.
*ki?*} is compared (Gäo 2014b, p. 73) to the Uralic etymon after the equivalents: Estonian käsikäe 'hand, arm'; Finnish käsikäte- 'hand, arm'; Sami/Lappish giehtalkiehtalkieiktikkt 'hand'; Mordvin keälkäd 'hand'; Mari/Cheremis kit 'hand'; Udmurt/Votyak ki 'hand'; Komi/Zyrian kitί 'hand'; Khanty/Ostyak kālkik 'hand'; Mansi/Vogul kālkik 'hand, forehead'; Hungarian kéz 'hand'; {"Proto-Finno-Ugric" *käte 'hand' (1988-UEW, p. 140)}. This etymology has not been identified in other languages. [Proto-Sino-Uralic *keōX 'arm-hand-finger']

#6【脂】《說文(121-SW): 戴角者脂無角者膏('grease'); 玉篇(543-YP): 脂膏也('grease'); 鯛鏡(1161-YJ): 將轉第六開三等平聲歺音清(inbound, 6th final, labialized-, 3rd division, A tone, dental initial voiced-); Mandarin zhi (zh) 'grease'; Cantonese zil 'grease'; Minnan tsi 'grease'; Japanese Go-on shi; Kan-on shi; [OC rhyme 脂韻 *-ð; OC-W *teiei; OC-Z *kji] is compared (first publication) to the Uralic etymology after the equivalents: Estonian kesiķee 'bran, husk'; Finnish kesiķete- 'cuticle'; Sami/Lappish --/-katt/-kg-тт-- 'skin'; Mordvin kedlíkád 'skin, peel, husk'; {"Proto-Finno-Ugric" *keðe 'skin, leather, peel' (1988-UEW, p. 142)}. This etymology has not been identified in other languages. [Proto-Sino-Uralic *keðo 'skin grease']

#7【蜜】《說文(121-SW): 《穀倉織也('sweet product of bee'); 玉篇(543-YP): 蜂所作('product of bee'); 鮑鏡(1161-YJ): 外轉第十開四等入聲唇音清濁(outbound, 17th final, labialized-, 4th division, D tone, labial initial voiced-); Mandarin mǐ 'honey'; Cantonese matš 'honey'; Minnan bit 'honey'; Japanese Go-on michilmitsu; Kan-on bitsu; [OC rhyme 蜜韻 *-ð; OC-W *miæt; OC-Z "*mlig"] is compared (Gäo 208, p. 135) to the Uralic etymology after the equivalents: Estonian mesiłike 'honey'; Finnish mesiłekete- 'honey'; Sami/Lappish miehtalmietal --/mięgt/-miot 'honey' (not loanword from Finnish, because of rhyme correspondence); Mordvin medľmad 'honey'; ?{Mari/Cheremis mǔlμīj 'honey'; Udmurt/Votyak mulmu 'mead'; Komi/Zyrian ma 'honey'; → Nenets Sjoida má 'honey'} (uncertain equivalents, out of rhyme correspondence); Hungarian méz 'honey'; {"Proto-Finno-Ugric" *mete 'honey, mead' (1988-UEW, p. 273)}. [Proto-Sino-Uralic *mbēðs 'honey, mead']

This etymology has also been identified (since Moller, 1756, p. 155: only Estonian ~ Finnish ~ some Germanic) in Indo-European languages: {Germanic: Danish mjod 'mead'; Swedish mjöd 'mead'; Norwegian mjod 'mead'; Icelandic mjödur 'mead'; Old Norse mjöðr 'mead'; English mead; Old English medu 'mead'; Dutch mede 'mead'; Old Low German medu 'mead'; German Met 'mead'; Old High German metu 'mead'}; [Baltic: Latvian medus 'honey, mead'; Lithuanian medūs 'honey'; Old Prussian meddo 'honey']{; Slavic: Czech med 'honey'; Slovak med 'honey'; Polish miód 'honey'; Russian мед/мед (mjodmed) 'honey, mead'; Belarusian мед (mjod) 'honey'; Ukrainian мед (med) 'honey'; Bulgarian мед (med) 'honey'; Serbo-Croatian мёд/mёd 'honey'; Slovene мед 'honey', Old Church Slavonic мёд (med) 'honey'}{; Celtic: Irish midh 'mead'; Old Irish mid 'mead'; Welsh medd 'mead'; Cornish medh 'mead'; Breton mez 'mead'; Gaulish medu 'mead'}{; Greek μέθη (méthi) 'drunkenness'; Ancient Greek μθου (methu) 'wine (Epic)'{; Indo-Iranian: Sanskrit मधु (madhu) 'sweet thing, honey, milk'; Avestan madh 'wine'; Ossetian мед/муд (mydl/mud) 'honey'; Northern Kurdish mot 'molasses'; Classical Persian م (mey) 'alcoholic beverage'; Tajik май (may) 'wine' (1989-CLI, p. 460); Tocharian-B mīt 'honey'}.

---

*Refutation: Previously claimed (Koivulehto, 1983, p. 119) etymological equivalents after Proto-Indo-European *skento; Proto-Germanic *skénja; Old Norse skin 'skin' are rejected due to phonetic inconsistencies. Previously claimed (Aikio, 2006, p. 17) etymological equivalents after Proto-Samoymedic *ket 'shape, appearance, figure'; Nenets syiq 'shape, figure'; Enets ñi 'resemblance, similarity, likeness; omen, sign'; Nganasan çäjä 'he, she' are rejected due to phonetic and semantic inconsistencies. Previously claimed (1996-CVSST) etymological equivalents after Tibetan ᐈkhy(u)z-pa 'to freeze, congeal, ská 'thick (of fluids); Burmese kja 'strong (of tea); Kachin bgi 'be frozen, be stiff, numb' are rejected due to phonetic and semantic inconsistencies.
{Proto-Indo-European *mēdʰa- 'honey, mead' (2008-NIL, p. 467)}. This etymon has not been identified in other languages as inherited equivalents. {Proto-Sino-Uralo-Indo-European *mbēθaS. See the overview section for this question.}

#7) 【比】 《說文》: 密也('close, dense'); 玉篇(543-YP): 類也校也並也('alike, collate, side by side'); 韻鏡(1161-YJ): [匕]內轉第六開四等上聲唇音清(inbound, 4th final, labialized-, 4th division, B tone, labial initial voiced-); Mandarin bi 'contrast'; Cantonese bei2 'contrast'; Minnan pi 'contrast'; Japanese Go-on bilhi; Kan-on hi; {OC rhyme 脂韻 *-ða; OC-W *piei; OC-Z *pi?i}是 compared (first publication) to the Uralic etymon after the equivalent: Hungarian biz- 'entrust'. This etymon has not been identified in other languages. {Proto-Sino-Uralic *pēðaX 'side by side'}

Overview

The etyma #1【歲】，#2【児】 and #3【沫】 form a rhyme correspondence (Table 1).

**Table 1.** Rhyme correspondence (Rc#2020GaoAt1): Old Chinese rhyme 月韻 *-ta : Mandarin -uei : Cantonese -eoi : Minnan -ue : Estonian -ose-oe : Finnish -osi-ote- : North Sami -uohta

<table>
<thead>
<tr>
<th>DOM</th>
<th>Mandarin</th>
<th>Cantonese</th>
<th>Minnan</th>
<th>Estonian</th>
<th>Finnish</th>
<th>North Sami</th>
</tr>
</thead>
<tbody>
<tr>
<td>【歲】</td>
<td>suē(年)</td>
<td>seoi3</td>
<td>suē/huē/hē</td>
<td>vooēvvoe</td>
<td>vuosīvvoe-</td>
<td>-vuohta</td>
</tr>
<tr>
<td></td>
<td>year</td>
<td>year</td>
<td>year old</td>
<td>annual harvest</td>
<td>year</td>
<td>year</td>
</tr>
<tr>
<td>【児】</td>
<td>diē(年)</td>
<td>deoi3</td>
<td>tuē/tui</td>
<td>tōsītōe</td>
<td>tōsī-vōtōe-</td>
<td>-duohta</td>
</tr>
<tr>
<td></td>
<td>correspond</td>
<td>correspond</td>
<td>correspond</td>
<td>true, truth</td>
<td>true, truth</td>
<td>true, truth</td>
</tr>
<tr>
<td>【沫】</td>
<td>mō</td>
<td>mutate</td>
<td>buā/buāh</td>
<td>--</td>
<td>--</td>
<td>-muohta</td>
</tr>
<tr>
<td></td>
<td>foam</td>
<td>foam</td>
<td>foam</td>
<td></td>
<td></td>
<td>snow</td>
</tr>
</tbody>
</table>

This is a regular rhyme correspondence with three etyma. It is evidential. Its coincidental probability^ is as low as 1/53,824. The first etymon with a certain rhyme (1) * the first etymon with comparable onsets (1/4 [There are four sorts of onsets: labial, coronal, dorsal and labryngeal.]) * the second etymon falls into the same Old Chinese rhyme group (1/29 [There are 29 rhyme groups in Old Chinese.]) * the second etymon with comparable onsets (1/4) * the third etymon falls into the same Old Chinese rhyme group (1/29) * the third etymon with comparable onsets (1/4) = 1 * 1/4 * 1/29 * 1/4 * 1/29 * 1/4 = 1/53,824.

The etyma #1【歲】and #4【水】 etyma form an onset correspondence (Table 2).

**Table 2.** Onset correspondence (Oc#2020GaoAt2): Mandarin/Minnan su- : Cantonese s- : Estonian/Finnish v-

<table>
<thead>
<tr>
<th>DOM</th>
<th>Mandarin</th>
<th>Cantonese</th>
<th>Minnan</th>
<th>Estonian</th>
<th>Finnish</th>
<th>North Sami</th>
</tr>
</thead>
<tbody>
<tr>
<td>【歳】</td>
<td>suē(年)</td>
<td>seoi3</td>
<td>suē/huē/hē</td>
<td>vooēvvoe</td>
<td>vuosīvvoe-</td>
<td>-vuohta</td>
</tr>
<tr>
<td></td>
<td>year</td>
<td>year</td>
<td>year old</td>
<td>annual harvest</td>
<td>year</td>
<td>year</td>
</tr>
<tr>
<td>【水】</td>
<td>shū(年)</td>
<td>seoi2</td>
<td>suē/tsui</td>
<td>vesīvvee</td>
<td>vesī-vēte-</td>
<td>--</td>
</tr>
<tr>
<td></td>
<td>water</td>
<td>water</td>
<td>water</td>
<td>water</td>
<td>water</td>
<td>water</td>
</tr>
</tbody>
</table>

The etyma #4【水】, #5【指】，#6【蜜】and #7【比】 form a rhyme correspondence (Table 3).

---

^ Rebutation: Previously claimed (1996-CVSST) etymological equivalent Written Tibetan dpe 'pattern, model, symmetry' is rejected due to phonetic and semantic inconsistencies. Previously claimed (2007-EDOC, p. 162) etymological equivalents after Written Tibetan pʰyi 'behind', after'. Lepcha bim 'follow closely, belong to, be with, be next to' are rejected due to phonetic and semantic inconsistencies.

^ It is comparable to a lottery probability for 2 matching numbers chosen from 29 and 3 matching numbers chosen from 4 options, repeated.
The study has identified seven Sinitic and Uralic shared etymologies (etyma). Three of them form a rhyme correspondence. Two of them form an onset correspondence. Four of them form another rhyme correspondence. These regular sound changes validate the genetic connection between Sinitic and Uralic. The Sino-Finnic term for 'Jupiter, year' is among these seven etyma. It is demonstrated that this term should be aboriginal in Sino-Uralic languages.

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>DOM</td>
</tr>
<tr>
<td>【水】</td>
</tr>
<tr>
<td>【指】</td>
</tr>
<tr>
<td>【蜜】</td>
</tr>
<tr>
<td>【比】</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Table 4. Coda distinction (Cd#2020GaoAt4) in Sino-Uralic and Indo-European</th>
</tr>
</thead>
<tbody>
<tr>
<td>DOM</td>
</tr>
<tr>
<td>【水】</td>
</tr>
<tr>
<td>【指】</td>
</tr>
<tr>
<td>【蜜】</td>
</tr>
</tbody>
</table>

Conclusions

Using etymological methods, the present study has identified seven Sinitic and Uralic shared etymologies (etyma). Three of them form a rhyme correspondence. Two of them form an onset correspondence. Four of them form another rhyme correspondence. These regular sound changes validate the genetic connection between Sinitic and Uralic. The Sino-Finnic term for 'Jupiter, year' is among these seven etyma. It is demonstrated that this term should be aboriginal in Sino-Uralic languages.
References

121-SW – Xù, Shèn 许慎. Shuō wén jiě zì 說文解字. Luoyang 洛阳, 121.


