

The relationship between Proto-Indo-European and Proto-Yeniseian

Introduction

The Yeniseian language family is native to Central Siberia and consists of one extant language – Ket, and five extinct – Yug, Kottish, Arin, Assan, Pumpokol (1). These languages share many contact-induced similarities with the South Siberian Turkic languages, Samoyedic languages and Evenki. These include long-distance nasal harmony, the development of former affricates to stops, and the use of postpositions or grammatical enclitics as clausal subordinators (2).

Yeniseian nominal enclitics closely approximate the case systems of geographically contiguous families.

Despite these similarities, Yeniseian stands out among the languages of Siberia in a few typological respects, such as the presence of tone, the prefixing verb inflection, and highly complex morphophonology (3). This language family has highly elaborate verbal morphology and has been described as having up to four tones or no tones at all (4). To this day no relationship to other language family has been definitively proven, although many attempts were made. One of these attempts, the Dene-Yeniseian family, first proposed by Alfredo Trombetti and supported with evidence by Edward Vajda, has gained massive, but not universal, acclaim (5).

The Genetic Evidence

The Kets belong predominantly to haplogroup Q (93.8%) (6) and Proto-Indo-Europeans are thought to have mostly belonged to haplogroups R1b and R1a (7). The Yamnaya culture of Eastern Europe, which mainstream scholars identify with the Proto-Indo-Europeans, was exclusively R1b. This culture was made up of Eastern Hunter Gatherers and Caucasian Hunter Gatherers (8), the former one being associated with the Mal'ta–Buret' culture of Central Siberia, which was located west of Lake Baikal and roughly in the same area where historically the Yeniseian languages were spoken. The Mal'ta–Buret' culture is dated to 24000 BC to 15000 BC and is known for the only known sample of basal Y-DNA R* (9). The genetic makeup of this culture was found to be very similar to the ones of Yamnaya culture and Ket people (10).

Haplogroup Q and R are siblings and come from the same parent haplogroup – P (11). It is possible that the languages spoken by the people bearing these two haplogroups were also genetically related.

The linguistic evidence

No linguist has tried (to my knowledge) until now to connect Proto-Yeniseian and Proto-Indo-European and it's not hard to understand why. Apart from the fact that the homelands of these two language families are so far away from each other geographically and chronologically, they have some important typological differences. Some similarities still exist, for example, both Proto-Indo-European (12) and Proto-Yeniseian (13) had an SOV word order. Ket has an active-stative alignment (14) while the reconstructed ancestor of Proto-Indo-European, the Pre-Proto-Indo-European language, shows many features known to correlate with active alignment like the

animate vs. inanimate distinction, related to the distinction between active and inactive or stative verb arguments (15). Another distinctive feature of Yeniseian is morphological predictability, which enables a linguist to build a form, departing from a root, the known morphological inventory and morphological rules, and get it right without having seen the correct form before. In most of Eurasia the only language family that matches Yeniseian in this respect is Indo-European (3).

I didn't attempt to find sound correspondences because some of the reconstructions on both sides, especially for PY, are uncertain. Sometimes, linguists can't even agree on the phonemes of some modern Ket words. Nevertheless, one can find at first glance some correspondences, for example intervocalic <n> in PIE corresponds to <ń> in PY, final <n> corresponds to <ŋ>, <k> corresponds to <s> and <ǵʰ> corresponds to <k>.

The following list consists of a Proto-Indo-European lemma and a Proto-Yeniseian cognate. Sometimes additional evidence from Indo-European languages is given. For Proto-Yeniseian I used Sergei Starostin's reconstructions, but also modern Ket words and Heinrich Werner's reconstructions if available (1). The abbreviations PIE and PY are used for Proto-Indo-European and Proto-Yeniseian, respectively. ˇ

1. PIE *d^hewh₂- [smoke] = PY *duʔ(χ)- [smoke], Ket: duʔ ; Werner *duʔ
2. PIE *sénos [old] = PY *síń [old, withered], Ket: síń / sí:ń
3. PIE *(s)d^honu [fir tree] = PY *díńe [fir tree], Ket: dńń
4. PIE *temH- [dark] = PY *tum- [black], Ket: tũm ; Werner *t^hum
5. PIE *d^heh₁- [to do, put, place] = PY *di(j) [to lie down, put down], Ket: dij
6. PIE *ǵenh₁- [to produce, to beget, to give birth] = PY *ǵeʔŋ [people], Ket: dεʔŋ
7. PIE *gen- [to compress] = PY *ǵǎŋ [to knead, rub], Ket: da:ŋ⁴ ; Werner *d'aʔəŋə
8. PIE *gel- [to be cold, to freeze] = PY *ǵVr₁- (~l) [cold, frost], Kottish: čal ; Werner *t'al
9. PIE *ǵ^hes- [hand; to take] = PY *kas- (~g-) [take], Ket: kɔ:sí⁴
10. PIE *ǵónu [knee] = PY *qōń- (~χ-, -ǵ-) [cartilage], Ket: qɔń⁴ ; Werner *qɔʔəń'ə
11. PIE *g^wen- [woman] = PY *qVm- (~χ-) [woman], Ket: qĩm
12. PIE *g^wŏws [cattle] = PY *kuʔs [horse], Ket: kuʔs [cow] ; Werner *kuʔs
13. PIE *kh₂em- (Latin camur, Iranian *kamarā-) – [to bend, to curve] = PY *gamur- [crooked], Kottish kamur

14. PIE *temp- [to extend, to stretch] = PY *t[e]mbVl̥- [root], Kottish: thempul
15. PIE *k̑i- ~ *k̑e- ~ *k̑o [here, this] = PY *si- / *su- [stem of demonstrative pronouns], Ket sí:ŋ / síŋ [here] ; Werner *si-, *se- / *sə-, *so- / *su-
17. PIE *só, séh₂, tód [this, that] = PY *tu- [demonstrative stem], Ket tuda⁶ [this]
18. PIE *kom or *ku, *k^wom [to, towards], which gave Proto-Slavic *kъ(n) = PY *ka- / *kə- [demonstrative stem], Ket: kańŋə¹ / kańŋə⁶ [(towards) there]
19. PIE *peh₂w- [few, little] = PY *pVl- (~-r̥-, -r̥l-) [child], Arin: alpolát, Pumpokol: phálla and PY *poŋl [short], Ket: hɔŋl̥ ; Werner *p^hoŋl̥
20. PIE *seh₂y- [to be fierce, afflict] = PY *s[e]ji [furuncle; wound], Ket: síbaŋ⁶, sívaŋ⁶ ; Werner *sei
21. PIE *derk̑- [to see] = PY *de-s [eye], Ket: dēs ; Werner *des
22. PIE *k̑ers- [to run] = PY *ses [river], Ket: sēs Werner *set / *tet
23. PIE *b^hel-, *b^helǵ^h- [to swell] = PY *boks[e]ji (~-ɔ-) [pimple], Ket: bɔksá. Compound with the second component *s[e]ji [wound, sore]
24. PIE *k̑eres- [rough hair, bristle] = PY *sās [fur from reindeer's legs], Ket: śás⁴ Werner *seŋəsə
25. PIE *h₂eHs- [to burn, to glow] = PY *xus- [warm], Ket: ūś ; Werner *usə or PY *ʔes [God, sky], Ket: ēś ; Werner *es
26. PIE *sek^we-, *sk^wē- [to tell, talk] = PY *saga- [to say, speak], Ket: sagabé (Castr.), sáŋa-bet (Werner)
27. PIE *ten- [to stretch, to extend] = PY *ta(ŋ)aj [to pull, stretch], Ket: táŋaj / tánej
28. PIE *gerh₂- [to cry hoarsely, crane] = PY *guriraK [crane], Kottish: kurīrax
29. PIE *peyH- [fat, milk] = PY *pɔŋl̥ [fat], Ket: hōlé ; Werner *p^holə
30. PIE *h₁ésh₂ŋ [blood] = PY *sur [red, blood], Ket: súlam¹ ; Werner *suł
31. PIE *d^héǵ^hōm [earth, human] = PY *keŋt [man, person], Ket: kεŋt / kεŋd
32. PIE *g^wel- [throat] = PY *kərVd (~g-, -ǵ) [throat], Ket: kAlit⁶ / kAlat⁶ ; Werner *kərVd (~g-, -ǵ)

33. PIE *d^heg^{wh}- [to burn] = PY *doʔq (~ -χ), Ket: -dɔq (-rɔq) to burn (trans.)
34. PIE *hes- [to be] = PY *hVs- [to be], Ket: uśeŋ^{5,6} ; Werner *əsə(ŋ) / *usə(ŋ)
35. PIE *pewk̑- [pine] = PY *pōj [fir tree], Ket: hɔj-ɔkś ; Werner *p^hoʔəjə
36. PIE *d^hg^hyes- [yesterday] = PY *qodes (~χ-, -ɔ-) [yesterday], Ket: qɔrés⁵
37. PIE *bak- [peg, club] = PY *bäk- [log], Ket: bāyə ; Werner *baga
38. PIE *méynos [my, mine] = PY *b- [my], Ket: āp
39. PIE *men- [hand] = PY *biʔŋ [hand], Yug: biʔŋ
40. PIE *keku- (Middle Persian čakuč) [cudgel, hammer shaped stick] = PY *čok [axe], Ket: tōk ; Werner *t'okə
41. PIE *(s)k^wálos [large fish, sheatfish] = PY *χol- [a k. of fish], Ket: kɔłgit⁵ (Werner: qōłgit) ; Werner *qol
42. PIE *men- [to think, mind] = PY *ʔan[ɨ]ŋ [to think], Ket: aniŋbet⁶ / ańbet^{5,6} ; Werner *anəŋ-
43. PIE *kérh₂- [horn] or PIE *h₁éłk̑is [elk] = PY *sēr₁e [deer], Ket: śéł⁴ ; Werner *seʔəłə
44. PIE *kól-b^ho- [half] = PY *χɔlab [half], Ket: qɔłap⁵ ; Werner *qoləp ; The PIE root is uncertain as it has been reconstructed after the only known descendant: Proto-Germanic *halbaz
45. PIE *g^herd^h- [belt] = PY *guʔda [girdle, strap, string], Ket: kuʔt ; Werner *kuʔt
46. PIE *g^hreh₁- [to grow] = PY *gVre [grass], Kottish: kerī ; Werner *kełə
47. PIE *g^hey- [winter] = PY *gəte [winter], Ket: kḗti¹ ; it is unclear to me why Starostin reconstructed <g>, because all cognates in the Yeniseian languages have <k>. Werner also reconstructs *kəte
48. PIE *wósr̥ [spring] = PY *sir₁- [summer], Ket: śíli¹ ; Werner *siłə
49. PIE *h₂weh₁- [to blow(of wind)] = PY *bej [wind], Ket: bēj ; Werner *baj
50. PIE *g^wol- [ashes] = PY *qorVn- (~χ-, -ɔ-, -l-) [ashes], Ket: qɔłən⁶ / qɔllən⁶ ; Werner *qolən
51. PIE *ph₂tér [father] = PY *ʔob [father], Ket: ɔp ; Werner *ob(ə)

52. PIE *(s)ker- [to cut off] = PY *Kar [mountain], Arin: kar
53. PIE *sed- [to sit], PBS *sēstei [to sit down] = PY *sVs- [to sit], Ket: sésete "I sit"
54. PIE *méh₂tēr [mother] = PY *ʔama [mother], Ket: ām
55. PIE *telk- [to thrust, strike, crush] = PY*tokV (~-x-) [mortar], Ket: tō ; Werner *t^hop^hə
56. PIE *peh₃- [to drink] = PY *ʔop- (~ x-, -b), Ket: d-a-b-ɔp ; Werner *op
57. PIE *tek- [to run, to flow] = PY *teK- [drop, (rain)dropping], Kottish: ur-theκη
58. PIE *nu [now] = PY *ʔen [now], Ket: ēn ; Werner *en
59. PIE *swep- [sleep] = PY*sVm- [dream], Kottish: šame
60. PIE *k^wyeh₁- [to rest, peace] = PY *qut (~ χ-) [to be finished, end], Ket: -qut / -but
61. PIE *yeh₂- [to go]= PY *hejVη [to go], Ket: ējeη¹ / εjeη⁵
62. PIE *h₂éng^{wh}is [snake] = PY *ʔoηKoj [snake], Kottish: oηxoi
63. PIE *ne, *me [no, not] = PY *wə- [not, there is not], Ket: bḅń ; Werner *bə / *bən
64. PIE *h₂eys- [to wish, to request] = PY *si-aq- [to ask], Ket: síjaq⁵
65. PIE *splǵ^h-ēn- [spleen] (the exact root remains difficult to reconstruct) = PY *tVpVÍ- (~-b-) [spleen] Kottish: tebolä

Words with only one reconstructed cognate in PIE or PY:

1. PY *boʔk [fire], Ket: bɔʔk = Latin focus [hearth, fire], Armenian boc' [fire]
2. PY *deʔG [lake], Ket: dεʔ ; Werner *degə / *deʔə = PIE *d^henh₂- [to set in motion, to flow], *déh₂nu [river goddess]
3. PY *kūń (~g-) [wolverine], Ket: ku:ńe⁴ ; Werner *kuʔənə = PBS *kauná [marten]
4. PY *son- [blue, green], Ket: śon ; Werner *sʌj / *sʌn = PS *sińb [blue], PI *axśáyHnah [blue, green]
5. PY *doʔn [knife], Ket: dɔʔn = PI *dā- [to cut], Old Iranian *dāna-ka-

6. PY *qaíVŋ (~χ-) [gull], Ket: qaíəŋ⁵ = PC *wailannā [seagull]
7. Ket wīks [bull] = PIE *uksĕn [bull]
8. PY *sip- [rat], Ket: síγ-ut = OES собо́ль (sobol') [sable], Middle Persian [sable]
9. PY *sib- [to whisper], Ket: siverej-betta (Werner: sívérej) ; Werner *sip^həl = PS *šьрѣтъ [to whisper]
10. PY *maʔm [breast], Ket: maʔm = Ancient Greek mámmē (breast)
11. PY *χuʔs [tent made of birch bark, house], Ket: quʔś ; Werner *quʔs = PG *hūsa [house], possibly Latin casa
12. Proto-Slavic *tqxlb [rotten] = PY: *tul-(x)aʔq [rotten (wood)], Ket: tulaq⁵

Possible loanwords not mentioned before (to my knowledge):

1. PY *p[u]jm- [neck] - PT *bōjn [neck]
2. PY *kam(a) (~ q-, h-) [vessel, dish] - PT *kāp [vessel]
3. PY *senVŋ [shaman] - Evenki samān [shaman]
4. PT *köp- (to swell; foam) - PY *χɔpVr [foam]
5. PY *suʔ- [yellow] – PT *siarig [yellow, white]
6. PT *sōl [left] - PY *tul (~-l, -r₁) [left], Ket: tuł; Werner *t^huł / *suł

Conclusion

After analyzing the found information and evidence, it is not likely that all these cognates and similarities are coincidences. Apart from the fact that there are too many cognates, they consist of basic vocabulary and they match exactly (or almost exactly) semantically. Two other possibilities remain: language contact and genetic relationship. For this case language contact seems at best improbable. The last possibility is understandably dubious, but still possible. In order to say something decisively, more research needs to be done on this subject. My hope is that my article will start a wave of questions that will lead to solving this problem and why not, to asking even more questions.

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