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Agricultural terms in Indo-Iranian

Societas Linguistica Europaea, 49th Annual Meeting
Workshop *The language of the first farmers*
Napoli, September 2016

Friedrich-Schiller-Universität Jena



seit 1558

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Plan of the talk

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1. Introduction
Indo-Iranian languages
2. Domestic animals
3. Domestic Plants
 - a. Grain
 - b. Pulses
 - c. Onion etc.
4. Ploughing and fields
5. Conclusions



Introduction

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Indo-Iranian: major SE branch of IE

- Indo-Aryan
- Iranian
- Nuristani (intermediate, 3rd branch?)

Historical attestation since 3400 BP

Old Indo-Aryan: Vedic 3200-2500, Sanskrit
relics of similar language in Near East

Old Iranian 3200-2300: Avestan, Old Persian
grammatically very similar

Proto-Indo-Iranian (PII): ~ 4500-4000 BP



Introduction

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Middle Iranian

„West“: Middle Persian, Parthian, LW in Armenian

„East“: Alanic, Sogdian, Xwarezmian, Bactrian,
Khotanese (Saka)

Modern Iranian

Persian, Kurdish, Baloči, ...

Pašto (Pto.), Šuynī (Šu.), Waxi, Yaʿynobī, Munjī, ...

Middle Indo-Aryan

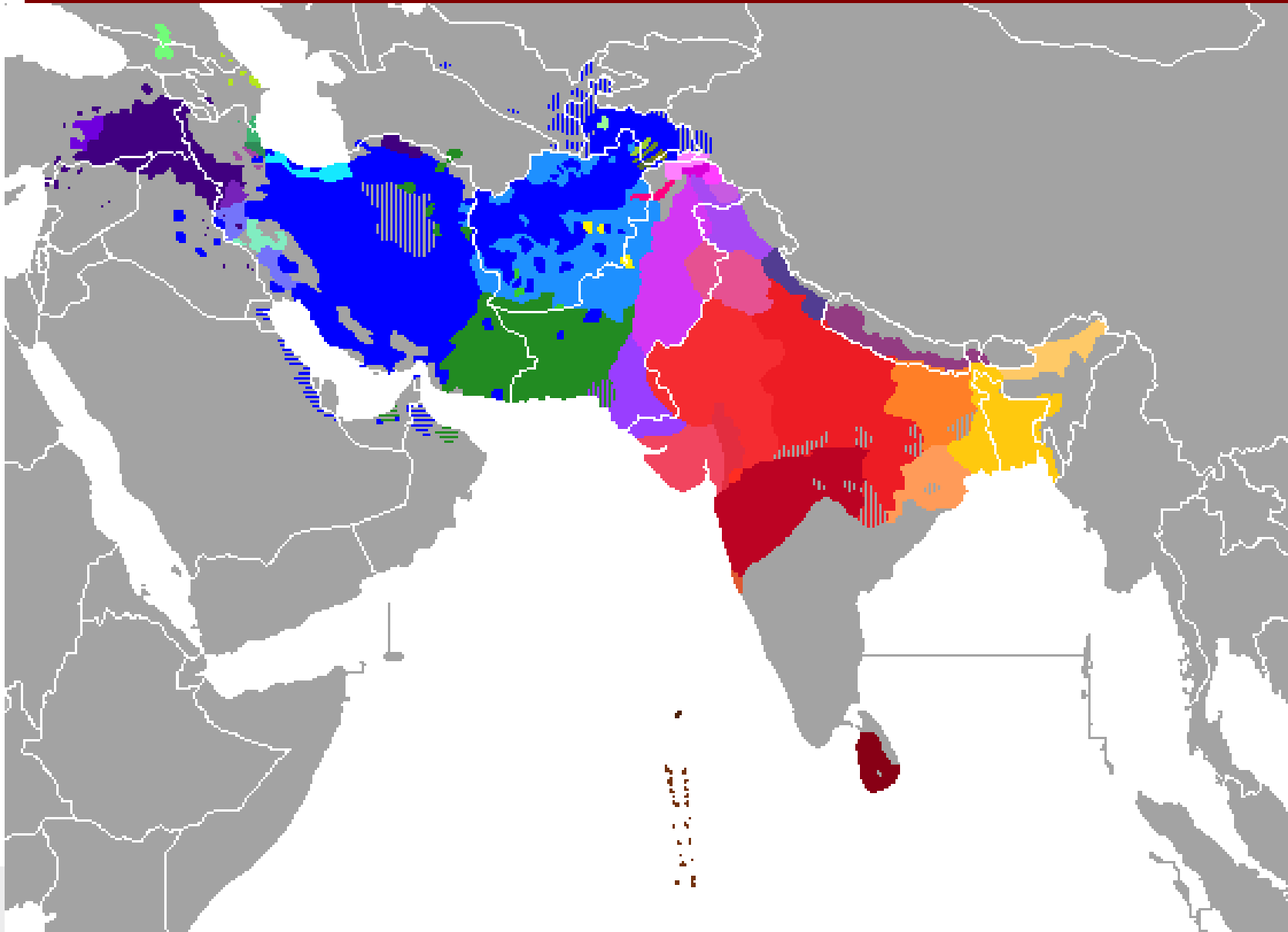
Pāli, Prākṛt



Introduction



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„Neolithic“ Vocabulary

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Animal husbandry / pastoralism

- Well developed
- Easily reconstructible

Plant cultivation

- Grain
- Pulses
- Technology: Ploughing
- More difficult to reconstruct

Wheeled vehicles

PIE? Certainly PII., including chariot **rátha-*



Domestic animals

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‘Cattle’ *Bos (primigenius) taurus*

Generic (epicene) **g'āw-* f./m.: Av. *gāuu-* = Ved. *gāv-*

Young **wats'a-* m.: Clr. **wasā-* = Ved. *vats'a-*

Female **aj^h'ī-*: Av. *azī-* = Ved. *ah'ī-*

(giving milk) **d^ha(H)in'u-*: Av. *daēnu-* = Ved. *dhen'u-*

Young **wać'ā-*, **gršt'i-*: Ved. *vaś'ā-*, *grṣṭ'i-*

Male **w'ršan-*: Clr. **wəršan-* = Ved. *v'ršan-*

**rš'ān-*: Av. *aršan-*, cf. Ved. *ṛṣa-bh'a-*

Young **hukš'an-*: Av. *uxšān-* = Ved. *ukṣ'an-*



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‘Horse’ *Equus ferus caballus*

Generic and male **aćwa-* m. > Av. *aspa-* = Ved. *'aśva-*

Young ? Persian **kurna-* ≠ Ved. *kiśor'a-*

Female **aćwā-* > Av. *aspā-* = Ved. *'aśvā-*

Male **aćwa-*

**w'ršā*

**rš'ā* (as for ‘bull’)

+ other, more poetic terms like ‘runner’



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‘Sheep’ *Ovis (aries) aries*

Generic and female **'hawi-* f. (PIE) > Ved. *'avi-*

Young **w'ər(h)an-* m. > Clr. **waran-* = Ved. *'uran-*

Female **mayš'ī-* > Av. *maēš'ī-* = Ved. *meṣ'ī-*

Male **mayš'a-* > Av. *maēš'a-* = Ved. *meṣ'a-*

**w'ršni-* > Av. *varšni-* = Ved. *v'rṣṇi-*



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‘Goat’ *Capra aegagrus hircus*

Generic and male **aj'a-* > Av. *aza-* = Ved. *aj'a-*

**b^huja-* m. (PIE) > Av. *būza-*

Generic and female **aj'ā* > Ved. *aj'ā-*

**b^hujā-* f. > Cir. **buzā-*

**scagā-* f. > Clr. **sagā-* > Oss. D. *sæγæ*

cf. Ved. *chagal'a-*, *ch'āgā-*

Young **skáni-* m.? (PIE?) > Av. *scaini-*

?Male **pazd'a-* > Ved. *bast'a-*



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‘Donkey’ *Equus africanus asinus*

**khara-* m. > Av. *xara-* = Ved. *khara-*
Ved. *gardabh'a-*, *r'āsabha-* m.

→ ‘Mule’

**aćwa-tara-* m. > Clr. **aswatara-* = Ved. *aśvatar'a-*

**khara-tara-* m. > Clr. **xaratarā-* > Khot. *khaḍara-*

‘Camel’ *Camelus bactrianus/dromedaries*

**h'uštra-* m. > Av. *uštra-* = Ved. '*uṣṭra-*

female Av. *ustrā-* ≈ (Late) Ved. *uṣṭrī-*





General terms

PII. **y'awa-* 'grain, barley' > Av. *yauua-* = Ved. *y'ava-* < PIE **j'ewo-*, cf. Hitt. *ewa-*, Lith. *javaĩ* etc.

CIr. **yawa-artaka-* 'grain-flour'

PII. **d^hān'ā-* '(roasted) seed, grain' > Av. *dānā-* = Ved. *dhān'ā-*; cf. Lith. *dúona* 'bread'

PII. **sasy'a-* 'crop, fruit' > Av. *hahīia-* = Ved. *sasy'a-*

PIr. **ādu-* 'grain, corn' > Av. *āδu-*

(from **ad-* 'to eat' or **had-* 'to dry', cf. Emmerick 1966; Szemerényi 1969; Hamp 1973; Rossi 2010)



Grain

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‘Barley’ *Hordeum vulgare*

PII. **y'awa*- ‘grain, barley’ < PIE **j'ewo*-
in most lang., esp. Western Iranian,
Indo-Aryan and South Nur.

Oss. ‘millet’

North Nur. **wrīji*- (elsewhere ‘rice’)

Clr. **kasaka*- (?)

(Parthian >) Arm. *kask*, NP. *kašk*,

Pam. Munj. *kosk*, Šu.+ *čūšj*, Yazg. *kusk*

Khot. *chaska*- (*ch*- irregular!)



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Clr. **rucā-*

Khot. *rrusā-*, Xwar. *rsy*

hardly directly connected with next
(pace Bailey 1979)

Clr. **arpucyā-* (?), only Modern Eastern

Pto. *orb'əša*, Pam. Isk. *urv̄s*, Yidya *yēršio*

Cf. Turkic *arpa*?

Derivation from European IE **alb^hi-*

(pace Witzel 2009) impossible

Pto. *rb* only < **rp*



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‘Wheat’ *Triticum* sp.

Clr. **gantu(H)ma-/*gandu(H)ma-*

Av. *gaṇtuma-* < **gantu(H)ma-*

Pto. *yan'əm* < **ganT'u(H)ma-*

Parth. *gndm* < **ganTuma-*

Waxi *ǰədim* < **ganTuHma-*

MP *gnm* < **ganduma-*

Khot. *ganama-* < **gandu(H)ma-*

Bal. *gandūm* < **ganduHma-*

IA. + Nur. **gawd^h'u:ma-* (‘cow-smoke’?)

Ved.+ *godh'ūma-* ~ **gadhūma-*, **gedhūma-*



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	nt	nd	uH	u
Avestan	+		+	+
Wakhi	?	?	+	
Sogdian; Pashto; Šuyni	?	?	?	?
Northwestern; Xwarezmian +	?	?		+
Balochi		+	+	
Khotanese		+	?	?
Middle Persian, Larestani		+		+
Yazyulami	+?		?	?

Also Yazy. $\gamma^w ont$ 'roasted and dried wheat'

< **gantu-* (**gunt-*)

Cf. Hittite *kant-* 'emmer, wheat' etc.



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‘Oats’ *Avena sativa*

Khotanese *hau* ‘? (a sort of grain)’

< **(h)awiš-/*(h)awiž-*, cf. also *hauśa* ‘a food’

Cf. Proto-Slavic **awisa-*; Proto-Baltic **awižā-*;

Latin *auēna*

Cf. Clr. **(h)aw(V)ša(ka)-*, ear (of corn), awn’

?Yazg. *wis* ‘avena’, Taj. Wj. *gis*

Clr. **dāsi-kā-*, **dāsina-*

Pam. Šu. *δēsak*, X. *desak*, R. *diwsak* ‘oats’; Munj. *lisok*

Sangl. *dāsīn*, Išk. *d̥sín* (Wx. *dosn* ‘Setaria’)



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**yawa-* > Rom. (northern) *job*

Jassic: *zabar* /saβar/

= Ossetic **sævæ*r (Abaev 1979: 306)

< Alanic **sab(a)ra-* < Clr. **sap(a)ra-* < PII. **ćap(a)ra-*

Cf. Germ. **habran-* < **k̑a/opró-* + *-n-*
(derived from **hafra-* 'he-goat'?)

Cf. some words for 'green, vegetables'

PIr. **capa-* 'green plants, grass'

Pto. *sāb'ə*, *sab'o* pl. 'vegetables', Y. *sawī*



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PIr. **capaćV-* ‘green’ / **cāpaćī-* ‘green’

MP. p. *spz, sbz* /*sabz*/, NP. *sabz*

Šu. *sēpc*, Roš. *sēpc*

Cf. Ved. *ś'āpa-* ‘drifting wood’

Lith. *šāpas* (2) ‘straw’ < IE **kópo-*

?Khotanese (all irregular!)

tcāve ‘potherbs’

ysba ‘cane, reed’ (Tib. *spa*!)

ṣavara- ‘green plant’

sapala- ‘green stuff (in the crop of a bird)’



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‘Rye’ *Secale cereale*

Not normally cultivated, no older term

Blažek 2003: **rugi-* > Clr. **rujika-*

in Šu. Bajui *rōy̌z*, Roš. *rûz* ‘ear (of grain)’

cf. Germanic, Balto-Slavic **rug^hi-*

However: Šu. *ō* < **ā/a* vs. *u/a* < **u*

y̌z/wz < **rz* (or maybe < **zV_k* but not **jV_k*)

Rather < **rārza-*, cf. **rarz-* ‘to tremble’ > Šu. *rāy̌j-*
(Morgenstierne 1974)



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‘Rice’ *Oryza sativa*

**wrīj^hi-* > OP. **vrīzi-*; Pto. *wr'iže* f. pl.
= Ved.+ *vrīh'i-* m.; Pa. Pk. *vīhi-* ...
(⇒ LW Par. *rahō*)

Iranian variants with identical root

**wrījana-* > Orm. *rīzan*

**wrījaka-* > Sogd. sm. *rysk*, b. *ryz'kh*

**wrījuka-* > Khot. *rrīysū*



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More distant variant Clr. **bringa-*

MP. p. *blnc*, m. *brynz* /brinz/, Sogd. *βrync* /vrinč/

Arm. *brinj*; NP. *birinǵ*, Kurd. *birinc*

Tal. *birz*, Siv. *birji*

Cf. Western loans: Greek *óryza*/*óryzon* etc.

‘Unhusked rice’

Skt. ep.+ *śāli-* etc., Nur. km. *šāl'i*

LW Pto. *šole* pl.; Orm. *šōl*, Par. *šēl*, YM. *šālē*



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‘Broomcorn millet’ *Panicum miliaceum*

Clr. + Nur. **(h)arjan'a-*

(Parth. >) MP. p. *'rzn*, NP. *arzan*, Pto. *zdən*, Wx. *yirzn*

...

→ OP. **(h)arduma-* > MP. p. *'lwm*, Baxt. *halum*

Nur. v. *üj'ũ*, a. *až'ũ*, w. *əzũ*

North Nur. **lāwa-*: km. kt. *řov*, w. *lav*

Ved.+ *'aṇu-*

(> Nur. *aṇ-*)

Ved.+ *śyām'āka-* ‘*Echinochloa frumentacea*’



Grain

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‘Foxtail millet’ *Setaria (italica)*

Clr. **gāwərca-*: OP. **gāwərθa-*, MP. p. *g(′)hl / g′wls*; NP. *gāl / gāwars* ... Pto. *γošt*; Khot. *gau’sä* ‘*Setaria (viridis)*’

Nur. **kāca-*: km. *kačo*, kt. *kčo*, w. *kač* ‘*Setaria italica*’
cf. MP. NP. *kāh* ‘straw’

Ved. *k’āśa-* ‘*Saccharum spontaneum (a grass)*’

Ved.+ *priy’aṅgu-* ‘*Setaria italica*’

Sh. *pīnǎ* etc. LW from IA, not inherited
(≠ Latin *pānīcum* ‘*Setaria italica*’)

Skt.+ *kaṅku-*, *kaṅgu-* ‘id.’



Pulses

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‘Bean’ *Vicia faba* (Europe)

‘Vetch’ *Vicia ervilia*, *Vicia sativa*

‘Mung bean’ *Vigna radiata* (< Iran)

‘Black bean’ *Vigna mungo* (< India)

CII. **m'āša*- (non-IE structure!)

MP. p. *m'š* ‘vetch?’, NP. *māš* ‘vigna radiata, pulse’
(Nur. km. *m'oš* LW?)

Ved.+ *m'āša*- ‘vigna mungo’ (not apt for sacrifice)

Cf. Toch. B *māśak*, *māšikāni* < Indic; Arabic *māš*



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PIr. **mušā-*, **mušakā-*?

Shgr.+ *maṣ*; Sogd. *mwškh*, Yagn. *mṣšk*

Ved.+ *mudg'a-* 'vigna radiata'

Ved. *kh'alva-* 'vigna radiata?' AV+, *khárva-* MS

Ved. *garm'ut-* f. 'wild beans' YV+

CIr. **sraxā-*

Xufi + *ṣāš*, Yazg. *ṣāx* (Wx. *ṣaṣ* 'pea')



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‘Lentil’ *Lens culinaris*

Clr. **winuka-*

MP. p. *wynwk* /winūg/ ‘lentil’, NP. *bunū* ‘pulse’
(Khot. LW *viṇakä* ‘chickpea?’)

Clr. **nazyuka-* (?)

Khot. *nīysva* pl.; NP. *nask*, Kurd. *nîsk*

Clr. **mižuka-*: MP. p. *mycwk'*, *myšwk'* /mižūg/,
NP. *mižū*? (cf. **māša-*, **mušā-*?)

Pre-IA. **masuHra-*

Ved.+ *mas'ūra-*



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,Chickpea' *Cicer arietinum*

Clr. **nahwata-* < **nasw-ata-*

MP. p. *nhwt* /noxūd/, NP. *nuxūd* 'chickpea'

Skt.+ *caṇa(ka)-*

'Pea' *Pisum sativum*

Clr. **sraxā-*: Wx. *šaṣ*

Clr. **nahwata-*; Clr. **winuka-*

Clr. **sardaići-*: Khot. *salīcā*

Ved. (YV)+ *satīn'a-* 'P. arvense'



Pulses

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Skt. *hareṇu-*

Yid. *xur-muyo* 'pea'?

Par. *maruk*

'Indian/white pea' *Lathyrus sativus*

Pam. Sangl. *karâš*, W. *kroş* 'Lathyrus sativus'
(LW < Khowar?)

Pam. Yid. *pateko*, Sangl. *paṭək*, Wx-Taj. *patək*
'Lathyrus sativus', cf. Wx. *ptyk* 'flour from beans'
LW from Indo-Aryan **piṣṭāka-*



Onion & Leek

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‘Onion’ *Allium cepa*

PIr. **piyāwa*-(*ka*-/*ća*-)

Khot. *pau*, Sogd. *py’k*; Yidga *pīy*, Yazg. *piyeğ*

NP. *pīyāz*, Kurd. *pîvaz* (> Bal. *pīmāz*)

PIr. **cauxa*-

NP. *sōx*, Arm. *sox*; cf. Turkic **soyan*?

Ved. *palāṇḍu*- DhS+

‘Leek’ *Allium ampeloprasum*

PIr. **kabardā*-

NP. *kavār*; Sogd. *kβrδh* /*kəvarδ*/



Onion & Leek

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‘Garlic’ *Allium sativum*

PIr. **sigra*-

OP. **θigra*-, NP. *sīr* (> Kurd. *sîr*)

PIr. **bərjna*-

Sogd. ’βzny, Pto. ’uṣa, Wan. m’urža, Yid. wıṣnu

PIr. **baudana*-

Par. *bīn*; Oss. D. *bodæn*

PIr. **jambasta*-

Khot. *ysaṃbasta*-

Skt. *laśuna*-



Ploughing

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‘to plough’

PII. **kar-*, **karš-* >

PIr. **kāraya-* ~ **k^əršta-* ‘to sow, plant, plough, till’

Ved. *kṛṣ'a-* (~ *kārṣa-* ‘to pull’)

Cf. **kṛš'i-* ‘ploughing, furrow’

> Av. *karšāii-* = Ved. *kṛṣ'i-*

(both in *figura etymologica*)

derivatives Av. *karsiuaṇt-* ~ Ved. **kṛṣīvan-*

**karš-* also: ‘border, land’: CIr. **karswar*, Ved. *kṛṣṭ'i-*

Cf. Greek *télson* ‘furrow’ < **k^wéls-o-*



Ploughing

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‘Field, cultivated plants’

PII. **(h)ar(H)w'arā-* f. > PIr. **(h)arwarā-*:

Av. *uruuarā-* f. ‘plant, plants’; MP. p. *'wlwl*, m. *'wrwr*
/urwar/; Parth. *'wrwr /urwar/*, Pl. *'rwr-'n*

Sogd. *(')rwr(h), rwr'* */arwar-a/* ‘healing plant’
= Ved. *urv'arā-* ‘field, seed field, cornfield’

cf. Greek *ároura*, Myc. *a-ro-u-ra* ‘cornfield’

Old/Middle Irish *arbor, arbe* ‘grain, corn’

(not with Witcak/Blažek from **arg^{wh}-r/n-* ‘millet’)



Ploughing

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Semantics problematic: no connection to ploughing in Celtic (BAILEY 1960: 80), nor much of it in Ilr.

‘Plough’

PII. **spāra-* ‘ploughshare’ > PIr. **spāra-*: MP. **spār* > NP. *sipār*, *supār*

= Ved. **spāra-*, **spāla-* > Pa. Pk. *phāla-* (\Rightarrow Ved. *phāla-*)

PIr. **spārana-* (?) > Šu. *sipōrn*; Wx. **spārna-* > *spundr*?

Ved. *s'īra-* n. RV10+, Pa.+, cf. *sītā-* ‘furrow’

Ved. *l'āṅgala-* n., Pa. *naṅgala-*, Pk. *laṅgala-*, *ṇaṅgara-*



Ploughing

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PII. **hayša-* ~ **hīš'ā-*

Av. *aēša* dual V. 14,10 'plough-pole?'

MP. p. *'yš /ēš/*, m. *hyš /hēš/* 'ploughshare',

NP. *xēš* 'yoke, plough'

Wx. *yīṣək* 'handle of plough'

LW > Mordva, Permian

Ved. *īṣ'ā-* 'pole, thill'

Cf. Hitt. *hissa-* 'carriage pole', Slavic **ajes-* > Slov. *oje*



Conclusions

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Pastoral terminology:

clearly inherited, regular correspondences

Plant cultivation terminology:

- most often irregular correspondences
early or later loans / „wanderwörter“
- Inheritance only for some grain terms probable:
**yáwa-*, **d^hānā-*, **(h)awiš-?*, **ćapr-?*
- Ploughing terms rather different from Europe

Pastoralist rather than agricultural spread



References

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- Abaev, Vladimir Iljič . 1979. *Istoriko-Ėtimologičeskij Slovar' Osetinskogo Jazyka*. Bd. 3. Leningrad: Izdatel'stvo Akademii Nauk SSSR.
- Bailey, Harold Walter. Indo-Iranian studies-II. *TPS* 53, 1954, 129-156.
- Bailey, Harold Walter. 1960. Indagatio Indo-Iranica. *TPS* 59, 1960, 62-86.
- Bailey, Harold Walter. 1975. Excursus Indocaucasicus. In: *Monumentum H. S. Nyberg* I. Leiden, 31-35.
- Bailey, Harold Walter. 1979. *Dictionary of Khotan Saka*. Cambridge: CUP.



References

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- Blažek, Václav. 2003. Towards the Fenno-Ugric cultural lexicon lexicon of Indo-Iranian origin. *IF* 108, 92-99.
- Blažek, Václav. 2005. Review of Witcak 2003. Sborník Prací Filozofické Fakulty Brněnské Univerzity / Studia Minora Facultatis Philosophicae Universitatis Brunensis A 53, 2005 – *Linguistica Brunensia* 219-225.
- Emmerick, Ronald E. 1966. Some reinterpretations in the Avesta. *TPS* 65, 1-23.
- Gershevitch, Ilya. 1971. Iranian words containing -ān-. In: Bosworth (ed.), *Iran and Islam in Memory of Vladimir Minorsky*. Edinburgh, 267-91 [= *Philologia Iranica*. Sel. and ed. by N. Sims-Williams. Wiesbaden 1985, 237-61].



References

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- Hamp, Eric P. 1968. Some nominizations of 'eat'. *TPS* 67, 106.
- . 1973. Once again on Iranian **ādu-*. *TPS* 72, 137.
- Mayrhofer, Manfred. 1992, 1996, 2001. *Etymologisches Wörterbuch des Altindoarischen*. 3 Vols. Heidelberg: Winter.
- Morgenstierne, Georg. 1929. *Indo-Iranian Frontier Languages. Vol. I, Parači and Ormuri*. Oslo: Aschehoug.
- . 1938. *Indo-Iranian Frontier Languages. Vol. II, Iranian Pamir Languages (Yidgha-Munji, Sanglechi-Ishkashmi and Wakhi)*. Oslo: Aschehoug.
- . 1974. *Etymological Vocabulary of the Shughni Group*. Wiesbaden: Reichert.



References

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–. 2003. *A new etymological vocabulary of Pašto*. Compiled and edited by J. Elfenbein, D. N. MacKenzie and Nicholas Sims-Williams. Wiesbaden: Reichert.

Rossi, Adriano. 2010. Possiamo continuare a connettere ir. **ādu-* a ie. ‘mangiare’? In G. Belluscio, A. Mendicino (eds.), *Scritti in onore di Eric Pratt Hamp per il suo 90. compleanno*. Cosenza: Università della Calabria: Centro Editoriale e Librario, 331-344.

Schmitt, Rüdiger. 1983/2011. Adukanaisa. *Encyclopædia Iranica*, I/5, p. 471; updated version online at <http://www.iranicaonline.org/articles/adukanaisa-a-du-u-k-n-i-s-name-of-the-first-month-march-april-of-the-old-persian-calendar-see-kent-old-persian-p>



References

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seit 1558

- Steblin-Kamenskij, Ivan M. 1999. *Ėtimologičeskij slovar' vachanskogo jazyka*. St. Petersburg: Peterburgskoe Vostokovedenie.
- Szemerényi, Oswald. 1969. Etyma latina II (7-18). In: *Studi linguistici in onore di Vittore Pisani*, II. Brescia: Paideia, 963-994.
- Witczak, Krzysztof Tomasz. 2003. *Indoeuropejskie nazwy zbóż*. Wydawnictwo Uniwersytetu Łódzkiego, Łódź 2003.
- Witzel, Michael. 2009. The linguistic history of some Indian domestic plants. *Journal of BioSciences* 34(6): 829-833.



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seit 1558

Grazie per la vostra attenzione!
Thank you for your attention!

