TOCHARIAN 2: PHONOLOGY AND NOMINAL MORPHOLOGY

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MOST IMPORTANT CHANGES FROM INDO-EUROPEAN TO PROTO-TOCHARIAN:

- **Vowels**
  - Long/short distinction lost, but long and short vowels come out differently!
- **Consonants**
  - All word-final consonants lost in Tocharian
  - Velar series have merged to /k/ /p/ /t/
  - Palatals and velars have merged
  - All consonants have a [+pal] and [-pal] variant

PHONOLOGICAL OVERVIEW

VOWEL SYSTEM OF TOCHARIAN A AND B

§ 3. Voyelles simples communes aux deux langues.

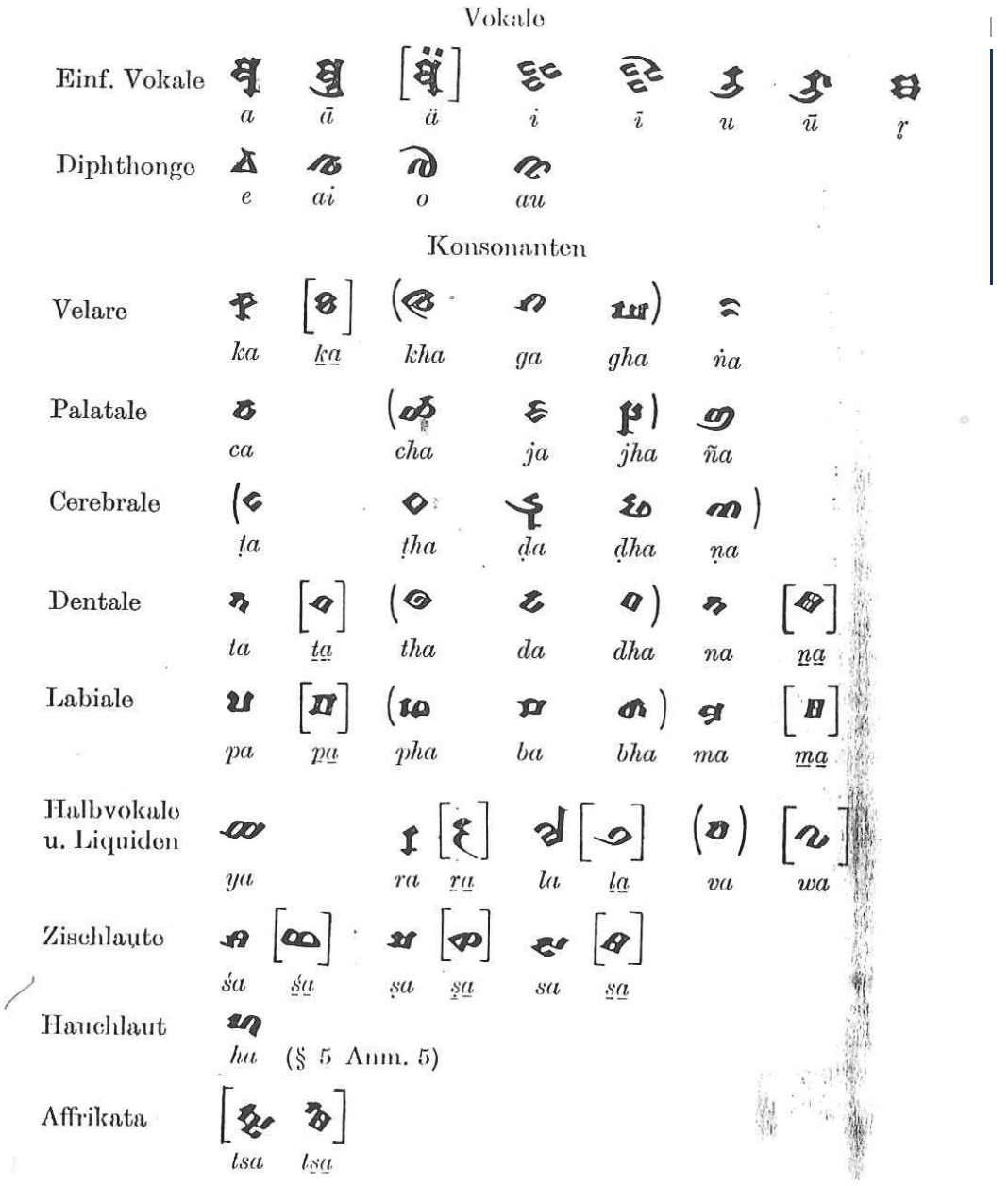
	Antérieures	Centrales	Postérieures
Aperture :			
Fermé	/i/ < i, ī >	/ɨ/ < ä >	/u/ < u, ū >
Moyen	/e/ < e >	/ʌ/ < a >	/o/ < o >
Ouvert		/ɑ/ < ā >	

CONSONANT SYSTEM OF TOCHARIAN A AND B

§ 5. Système consonantique.

	labiales	dentales	alvéolaires	palatales	vélaires	labiovélaires
Occlusives	**p**	**t**			**k**	**k^{u}** /kw/
Affriquées		**ts** /ts/	**c** /ʧ/			
Sifflantes		**s**	**ṣ** /ʂ/	**ś** /ɕ/		
Nasales	**m**	**n**		**ñ** /ɲ/	**ṅ** /ŋ/	
Liquides		**l**	**r**			
Semi-voyelles				**y** /j/		**w**

PHONEMES IN TEXT



Vokale

Einf. Vokale	*a*	*ā*	*ä*	*i*	*ī*	*u*	*ū*	*ṛ*
Diphthonge	*e*	*ai*	*o*	*au*				

Konsonanten

Velare	*ka*	*k̲a*	*kha*	*ga*	*gha*	*ṅa*		
Palatale	*ca*		*cha*	*ja*	*jha*	*ña*		
Cerebrale	*ṭa*		*ṭha*	*ḍa*	*ḍha*	*ṇa*		
Dentale	*ta*	*t̲a*	*tha*	*da*	*dha*	*na*	*n̲a*	
Labiale	*pa*	*p̲a*	*pha*	*ba*	*bha*	*ma*	*m̲a*	
Halbvokale u. Liquiden	*ya*		*ra*	*r̲a*	*la*	*l̲a*	*va*	*wa*
Zischlaute	*śa*	*ś̲a*	*ṣa*	*ṣ̲a*	*sa*	*s̲a*		
Hauchlaut	*ha* (§ 5 Anm. 5)							
Affrikata	*ʦa*	*ʦ̲a*						

PALATALIZED AND NON-PALATALIZED VARIANTS

[- palatalisé]	[+ palatalisé]
Consonnes simples	
p	*p^j (secondairement B **py**)
t	**c**
ts	**ś** (A, secondairement B **tsy**)
s	**ṣ**
k	**ś** (secondairement B **ky**)
n	**ñ**
m	*m^j (secondairement B **my**)
l	/l^j/ < ly>, < ll >
w	**y** (seulement en B)
Groupes consonantiques	
tk	A **ck**, B **cc**
tt	AB **cc**
sk	B **ṣṣ**
st	B **śc** (> **śś**, **ś**)
A **ṣt**	A **śś**
ṅk	B **ñc**, A **ñś**
nt	AB **ñc** (-**ñś**)

VOWEL SYSTEM OF COMMON TOCHARIAN

§ 8. Tableau des voyelles.

	Antérieures	Centrales	Postérieures
Aperture:			
Fermée	/i/ *i	/ɨ/ *ä	/u/ *u
Mi-fermée			/o/ *o
Mi-ouverte	/ɛ/ *æ	/ɔ/ *å	
Ouverte		/ɑ/ *ā	

CONSONANT SYSTEM OF COMMON TOCHARIAN

	labiales	dentales	alvéolaires	palatales	vélaires	labiovélaires
Occlusives	*p : *p'	*t			*k	*k^{w}
Affriquées		*ts	*c			
Sifflantes		*s : *ṣ		*ś		
Nasales	*m : *m'	*n		*ñ		
Liquides		*l : *l'	*r : *r'			
Semi-voyelles				*y		*w : *w'

NOMINAL MORPHOLOGY

TOCHARIAN GENDER/NUMBER SYSTEM

Gender

Masculine	Feminine	Neuter	Alternans=Neuter
Nouns	Nouns	Dem./Sing.	(Masc./Sing, Fem./Pl.)

Number

Singular	Plural	Dual	Paral	Singulative (B)
- Restricted in use -				

CASE SYSTEM, OVERVIEW

§ 51. Prenons comme **paradigmes de référence** ceux des substantifs, du même type flexionnel en synchronie (classe V.1), B *yakwe*, A *yuk* « cheval » et B *eṅkwe*, A *oṅk* « homme (mâle) » :

« cheval »

	B		A	
	Sing.	Plur.	Sing.	Plur.
Nom.	*yakwe*	*yakwi*	*yuk*	*yukañ*
Gén.	*yäkwentse*	*yäkweṃts*	*yukes*	*yukaśśi*
Obl.	*yakwe*	*yakweṃ*	*yuk*	*yukas*
Instr.	Ø	Ø	*yukyo*	*yukasyo*
Perl.	*yakwes*	*yakwentsa*	*yukā*	*yukasā*
Com.	*yakwempa*	*yakweṃmpa*	*yukaśśäl*	*yukasaśśäl*
All.	*yakweś(c)*	*yakweṃś(c)*	*yukac*	*yukasac*
Abl.	*yäkwemeṃ*	*yakwenmeṃ*	*yukäṣ*	*yukasäṣ*
Loc.	*yakwene*	*yakweṃne*	*yukaṃ*	*yukasaṃ*

« homme (mâle) »

Nom.	*eṅkwe*	*eṅkwi*	*oṅk*	*oṅkañ*
Gén.	*eṅkwentse*	*eṅkwents*	*oṅkis*	*oṅkaśśi*
Obl.	*eṅkweṃ*	*eṅkweṃ*	*oṅkaṃ*	*oṅkas*
Perl.	*eṅkwentsa*	*eṅkwentsa*	*oṅknā*	*oṅksā*
Com.	*eṅkweṃmpa*	*eṅkweṃmpa*	*oṅknaśśäl*	*oṅksaśśäl*
All.	*eṅkweṃś(c)*	*eṅkweṃś(c)*	*oṅknac*	*oṅksac*
Abl.	*eṅkweṃmeṃ*	*eṅkweṃmeṃ*	*oṅknäṣ*	*oṅksäṣ*
Loc.	*eṅkweṃne*	*eṅkweṃne*	*oṅknaṃ*	*oṅksaṃ*

SUFFIX INDEPENDENCY

Nom.Sg. B *yákwe* 'horse'

Gen.Sg. *yäkwéntse*

Perl.Sg. *yákwe-sa*

CASE FUNCTIONS: PRIMARY CASES

Case	Core functions	Non-core functions	With verbs
Nominative	Subject		
Oblique	Direct Object	DIRECTIONAL EXTENSIONAL DISTRIBUTIONAL	
Genitive	Indirect Object Indirect Subject Agent in Passive Constructions Possessive Genitive Subjective Genitive Objective Genitive		AB pärsk- 'fear'

CASE FUNCTIONS: SECONDARY CASES

Case	Core functions	Non-core functions	With verbs
Perlative	Agent in Passive Constructions	PERLATIVE ALLATIVE ADESSIVE Time (EXTENSION) INSTRUMENTAL CAUSAL MODAL	AB *pärsk-* 'fear' A *mrosk-* B *mrausk-* 'feel aversion' AB *kātk-* 'rejoice'
Lokative		LOCATIVE/INESSIVE ILLATIVE TIME (LIMITATION)	A *ritw-* B *ritt-* 'be connected to' AB *mänt-* 'be angry with'

CASE FUNCTIONS: SECONDARY CASES

Case	Core functions	Non-core functions	With verbs
Allative	Indirect Object	DIRECTIONAL	A *pot-* B *paut-* 'flatter' A *spänt-* 'trust'
Ablative		ABLATIVE TIME (DEPARTURE)	A *pās-* B *pāsk-* 'protect (against)' A *pros-* 'be ashamed' A *pärsk-* 'fear'
Comitative		COMITATIVE	
Instrumental	Agent in PC	INSTRUMENTAL	
Causal		CAUSAL	

THE TOCHARIAN CASE SYSTEM: HISTORY

- The Tocharian case system is re-built completely, compared to Indo-European.
- Basic problem: the loss of consonants in final position, which has destroyed the distincion between masculine/neuter and nominative/accusative.
- The Tocharian system shows several innovative features
  - Animacy/inanimacy distinction
  - Mixed inflectional/agglutinative morphology

RECONSTRUCTION OF THE CT PARADIGM (INFLECTIONAL/AGGLUTINATIVE)

	Singular	Plural
Nom.		
Obl.=Acc.		
Gen.		**-ns*
Perl	**-ā*	**-ns-ā*
All	**-cä*	**-ns-cä*
Loc.	**-næ*	**-ns-næ*

EVOLUTION OF CT FUNCTIONAL PARADIGMS

Stage I = Common Tocharian

	Dynamic		Static
Departure	Path	Goal	Goal Attainment Location
	Perl.	Obl. All.	Loc.

Stage II = Pre- A and Pre-B

		Dynamic		**Static**	
Departure		Path	Goal	Goal Attainment Location	
Internal	Abl.	Perl.	Obl. All.	Loc.	Loc.
External Secondary Adverbial	Abl.	Perl. Com.		Perl.	Perl.
	Caus.	Instr.			

TYPES OF DECLENSION OF NOUNS

1. **Type a) Nominative and accusative plural identical:** plural has a distinct suffix to which the genitive ending and the secondary affixes are added
    1. Ancient neuters (alternans)
    2. Animates (Class I-III)
2. **Type b) Nominative and accusative plural are different**
    1. Animates, corresponding to different IE formations of masculine and feminine gender (Class IV-VII)

TOCHARIAN DECLENSION CLASSES (TEB SYSTEM)

Type a) (nominative = oblique plural)

I: Plural B *-ā, -wa* A *-ā, -wā, -u* (< neuter-pl. in **-ā* < **-a,* consonant and u-stems)

II: Plural B *-na, -nma,* A *-(ä)ṃ* (< **-nā, *-mnā*, neuters of **-en-* and **-men-*stems)

III: B *-nta,* A *-nt* (< **-ntā*, from individualizing derivatives in **-nt-,* former collectives)

Type b) (nominative/oblique plural different)

IV: -r-stems, inherited kinship terms

V: Plural B nom. *-i*, obl. *-(ä)ṃ*, A nom. *-i/-ñ* obl. *-(ä)s* (IE **-oy* of the thematic stems/ **-ey-es* of the **-i-stems*)

VI: Plural nom. AB *-ñ*, obl. B *-ṃ,* A *-s* (<**-ns,* nasal stems, several subtypes)

VII: Plural nom. B *-ñc,* A *-ṃś,* acc. B *-ntäṃ* A *-ñcäs* <**-ntäs* (-nt-stems)

I. Klasse I

§ 203. Kl. I, 1: B *pikul* f., A *p͡u̯käl* (*p͡u̯kul*) f. „Jahr“. — Kl. I, 2: B *ost* a., A *waṣt* a. „Haus“.

		Wtoch.	Otoch.
Sg.	N.	*pikul*	*p͡u̯käl* (*p͡u̯kul*)
	Obl.		
	Instr.	—	**p͡u̯kulyo*
	Perl.	*pikultsa*	*p͡u̯klā*
	G.	*pikulntse*	*p͡u̯klis*
Adj.		**pikulṣe*	**p͡u̯kulṣi*
Pl.	N.	*pikwala*	*puklā*
	Obl.		
	Instr.	—	*puklāyo*
	Perl.	*pikwalasa*	*puklākā*
	G.	*pikwalaṃts*	*puklākis* (*puklāśśi*)
Adj.		*pikwalaṣṣe*	*puklāṣi*

II. Klasse II

§ 204. Kl. II, 1: B *ñem* a. „Name“, A *wram* a. „Sache“; B *aśiya* f. „Nonne“.

		Wtoch.	Otoch.
Sg.	N.	*ñem*	*wram*
	Obl.		
	Instr.	—	*wramyo*
	Perl.	*ñemtsa*	*wramā*
	G.	*ñemantse*	*wramis*
	Adj.	*ñemaṣṣe*	*wramṣi*
Pl.	N.	*ñemna*	*wramäṃ*
	Obl.		
	Instr.	—	*wramänyo*
	Perl.	*ñemnasa*	*wramnā*
	G.	*ñemnaṃts*	*wramnis* (*wramnāśśi*)
	Adj.	*ñemnaṣṣe*	*wramäṃṣi*

Wtoch.

	Sg.	Pl.
N.	*aśiya*	*aśiyana*
Obl.	*aśiyai*	
Perl.	*aśiyaisa*	*aśiyanasa*
G.	*aśiyantse*	*aśiyanaṃts*

III. Klasse III

§ 205. Kl. III, 1: B *yarke* a., A *yärk* a. „Verehrung“. — Kl. III, 2: A *ṃoko* a. „Frucht“.

		Wtoch.	Otoch.
Sg.	N. / Obl.	*yarke*	*yärk*
	Instr.	—	*yärkyo*
	Perl.	*yarkesa*	*yärkā*
	G.	*yärkentse*	*yärkes*
Adj.		*yärkeṣṣe*	*yärkaṣi*
Pl.	N. / Obl.	*yärkenta*	*yärkant*
	Instr.	—	*yärkantyo*
	Perl.	*yärkentasa*	*yärkäntwā*
	G.	*yärkentaṃts*	*yärkäntwis*
Adj.		*yärkentaṣṣe*	*yärkäntwāṣi*

§ 206. B *pācer*, A *pācar* „Vater“.

	Wtoch.	Otoch.
Sg. N.	*pācer*	*pācar*
Obl.	*pātär*	
Perl.	*pātärsa*	*pācrā*
G.	*pātri*	*pācri*
Adj.	*patarṣṣe*	*pācarṣi*
Pl. N.	*pačera (pātärñ)*	*pācri*
Obl.		*pācräs*
Perl.	*pacerasa (pātärñtsa)*	**pācrsā*
G.	*paceraṃts (pātärñts)*	*pācräśśi*

V. Klasse V

§ 207. Kl. V, 1: B *eṅkwe*, A *oṅk* „Mann“; B *yakwe* m., A *yuk* m. „Pferd“.

	Wtoch.	Otoch.
Sg. N.	*eṅkwe*	*oṅk*
Obl.	*eṅkwem*	*oṅkaṃ*
Perl.	*eṅkwentsa*	*oṅknā*
G.	*eṅkwentse*	*oṅkis*
Adj.	**eṅkweṣṣe*	*oṅkaṣi*
Pl. N.	*eṅkwi*	**oṅkañ*
Obl.	*eṅkweṃ*	**oṅkas*
Perl.	*eṅkwentsa*	**oṅksā*
G.	*eṅkweṃts*	**oṅkaśśi*

§ 210. Kl. VI, 1: B *riye* f., A *ri* f. „Stadt“. — Kl. VI, 2: B *pyāpyo* f., A *pyāpi* f. „Blume“; B *ek* a., A *ak* a. „Auge“.

		Wtoch.	Otoch.
Sg.	N.	*riye*	*ri*
	Obl.	*ri*	
	Instr.	—	*riyo*
	Perl.	*risa*	*riyā*
	G.	*rintse*	*riyis*
Adj.		*riṣṣe*	*riṣi*
Pl.	N.	*riñ*	*riñ*
	Obl.	*riṃ*	*ris*
	Instr.	—	*risyo*
	Perl.	*rintsa*	*risā*
	G.	*riṃts*	*riśśi*
Sg.	N.	*pyāpyo*	*pyāpi*
	Obl.	*pyāpyai*	
	Instr.	—	*pyāp(i)yo*
	Perl.	*pyāpyaisa*	*pyāpyā*
	G.	*pyapyantse*	*pyāpyis*
Adj.		*pyapyaiṣṣe*	*pyāpyāṣi*
Pl.	N.	*pyapyaiñ*	*pyāpyāñ*
	Obl.	*pyapyaiṃ*	*pyāpyās*
	Instr.	—	*pyāpyāsyo*
	Perl.	*pyapyaintsa*	*pyāpyāsā*
	G.	*pyapyaiṃts*	*pyāpyāśśi*

VII. Klasse VII

§ 212. B *walo*, A *wäl* „König“.

		Wtoch.	Otoch.
Sg.	N.	*walo*	*wäl*
	Obl.	*lānt*	*lānt*
	Perl.	*lāntsa*	*lāntā*
	G.	*lānte*	*lānt*
Pl.	N.	*lāñc*	*lāṃś*
	Obl.	*lāntäṃ*	*lāñcäs*
	Perl.	*lāntäntsa*	*lāñcsā*
	G.	*lantaṃts*	*lāñcäśśi*