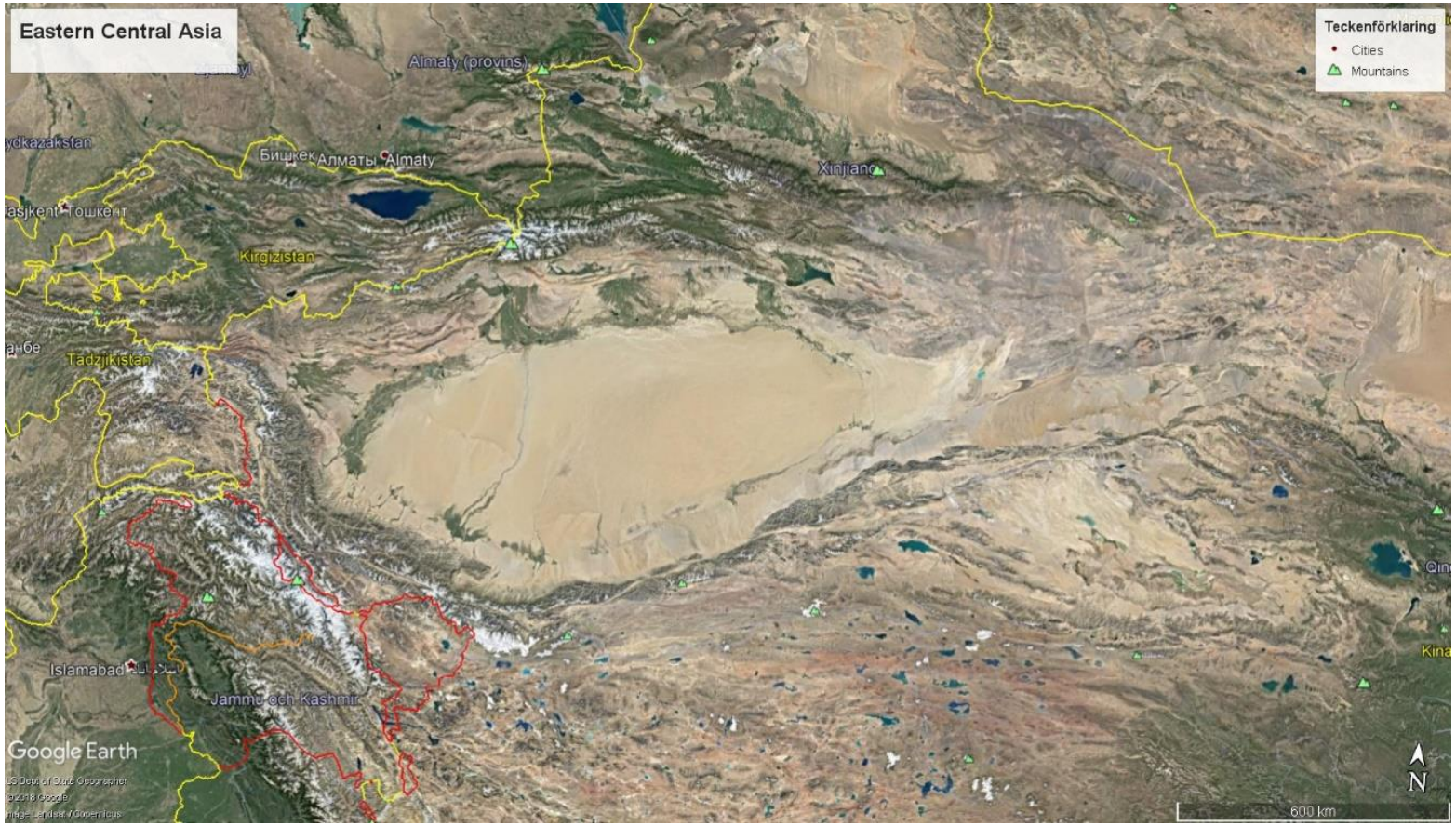
# TOCHARIAN I: LANGUAGES, PEOPLE, LITERARY GENRES, TEXT OVERVIEW

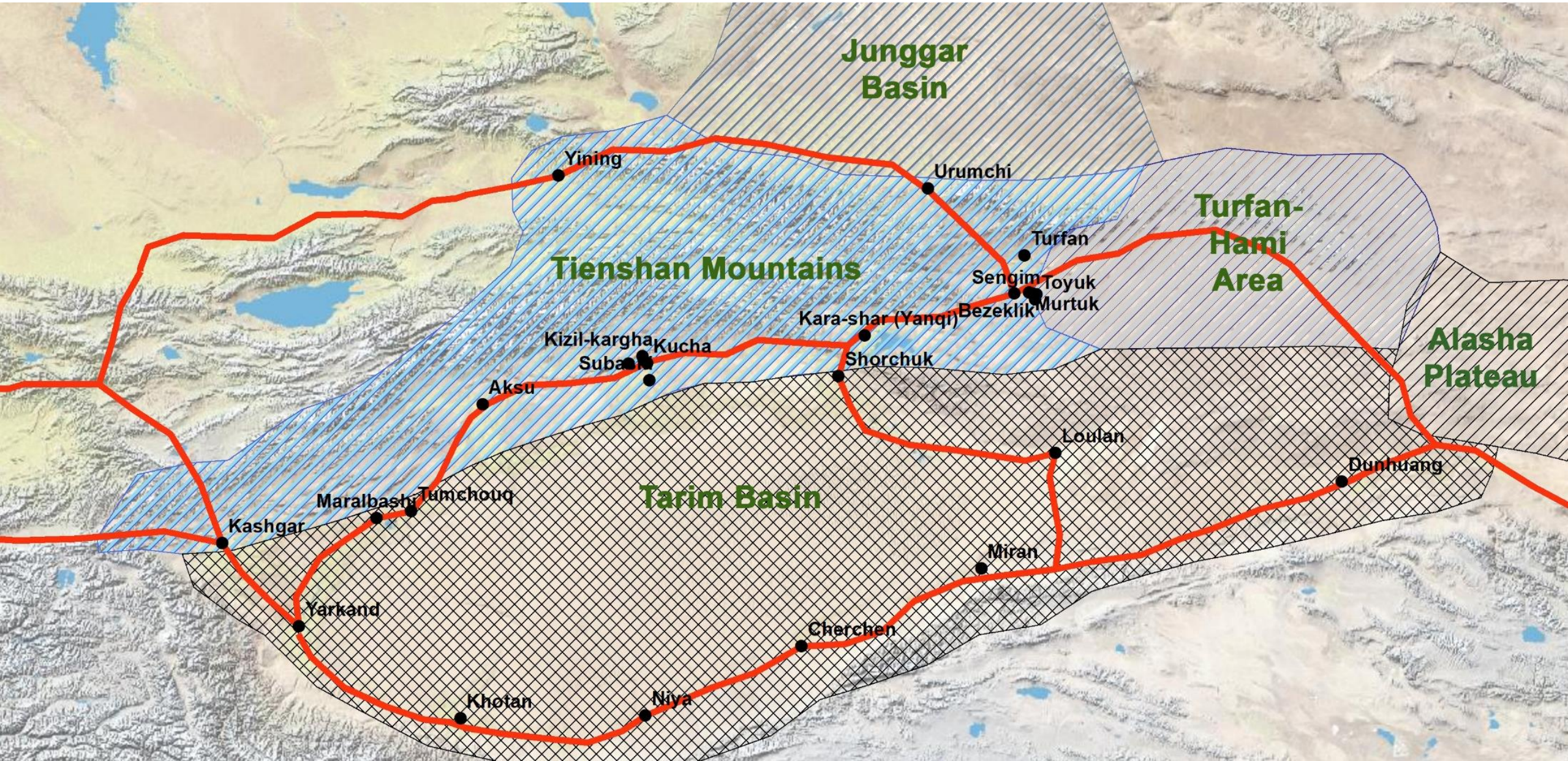
PAVIA SUMMER SCHOOL 2022, GERD CARLING

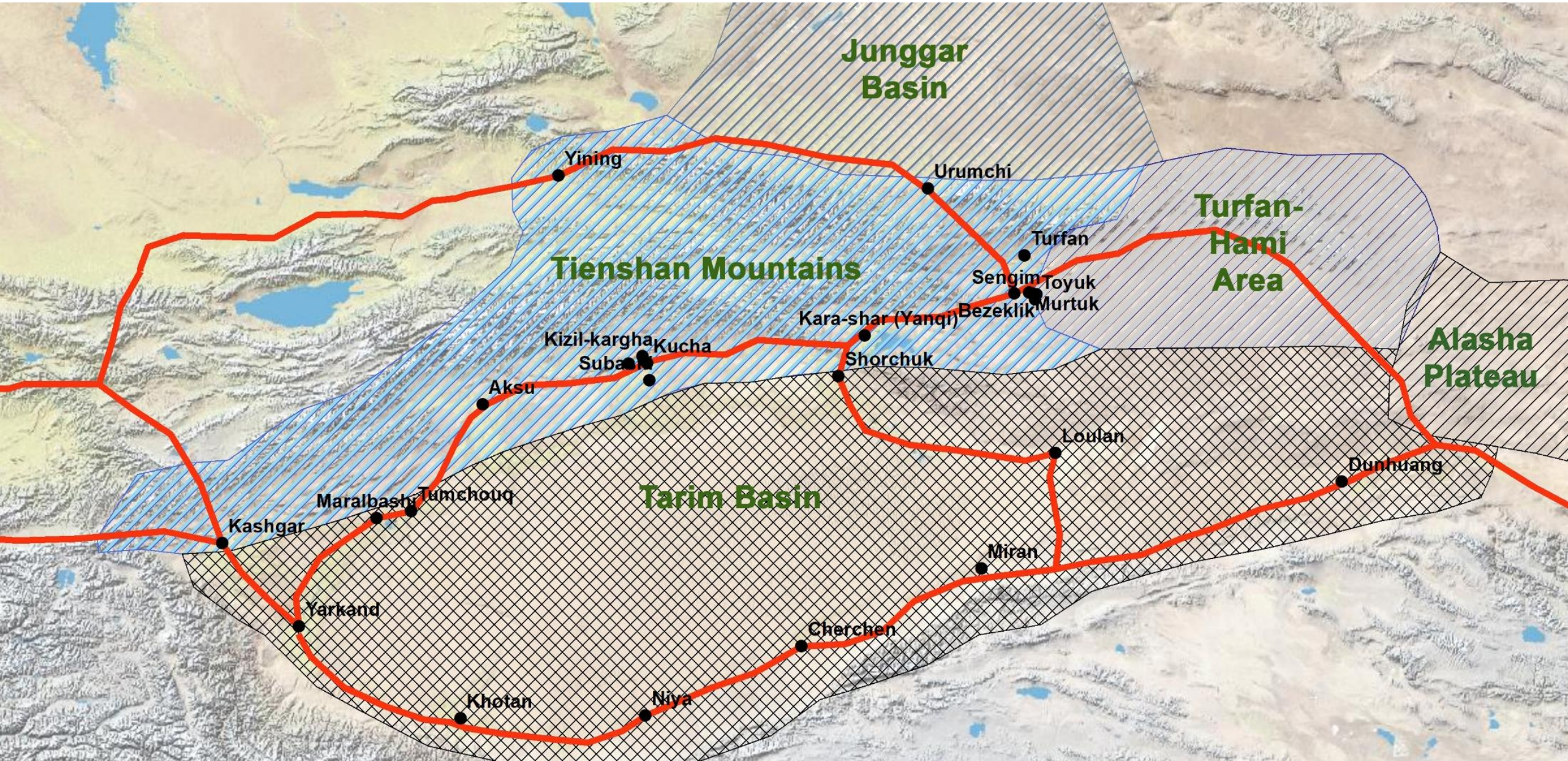
# LANGUAGES, GEOGRAPHY AND PEOPLE

# WHERE?

- Eastern Central Asia (ECA)
- Uighur Autonomous Region of Xinjiang,
- People's Republic of China




Junggar Basin
Yining
Urumchi
Tienshan Mountains
Turfan-Hami Area
Turfan
Sengim
Toyuk
Murtuk
Bezeklik
Kara-shar (Yanqi)
Kizil-kargha
Kucha
Shorchuk
Aksu
Alasha Plateau
Loulan
Dunhuang
Maralbashi
Tumchouq
Tarim Basin
Kashgar
Miran
Yarkand
Cherchen
Khotan
Niya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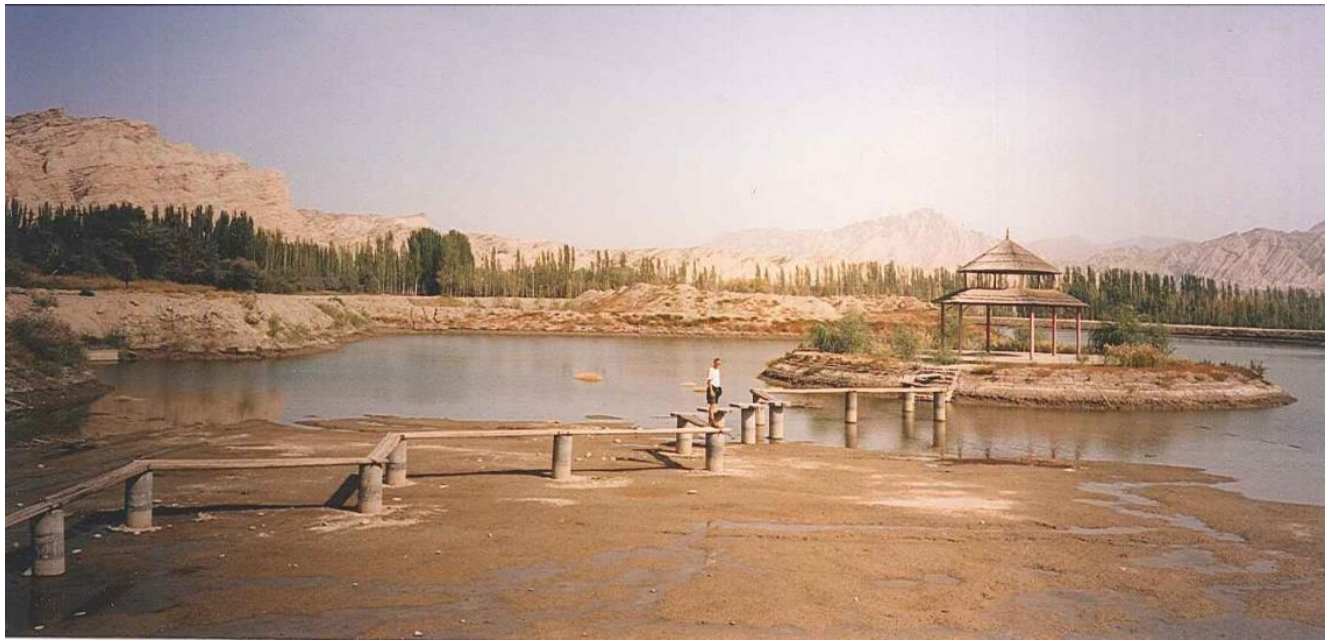
# Subsistence: Preconditions for living in a harsh climate

- Irrigation farming
- Tax collecting
- Sheep pastoralism



Pond for irrigation in the village of Qizil.
Photo: Gerd Carling

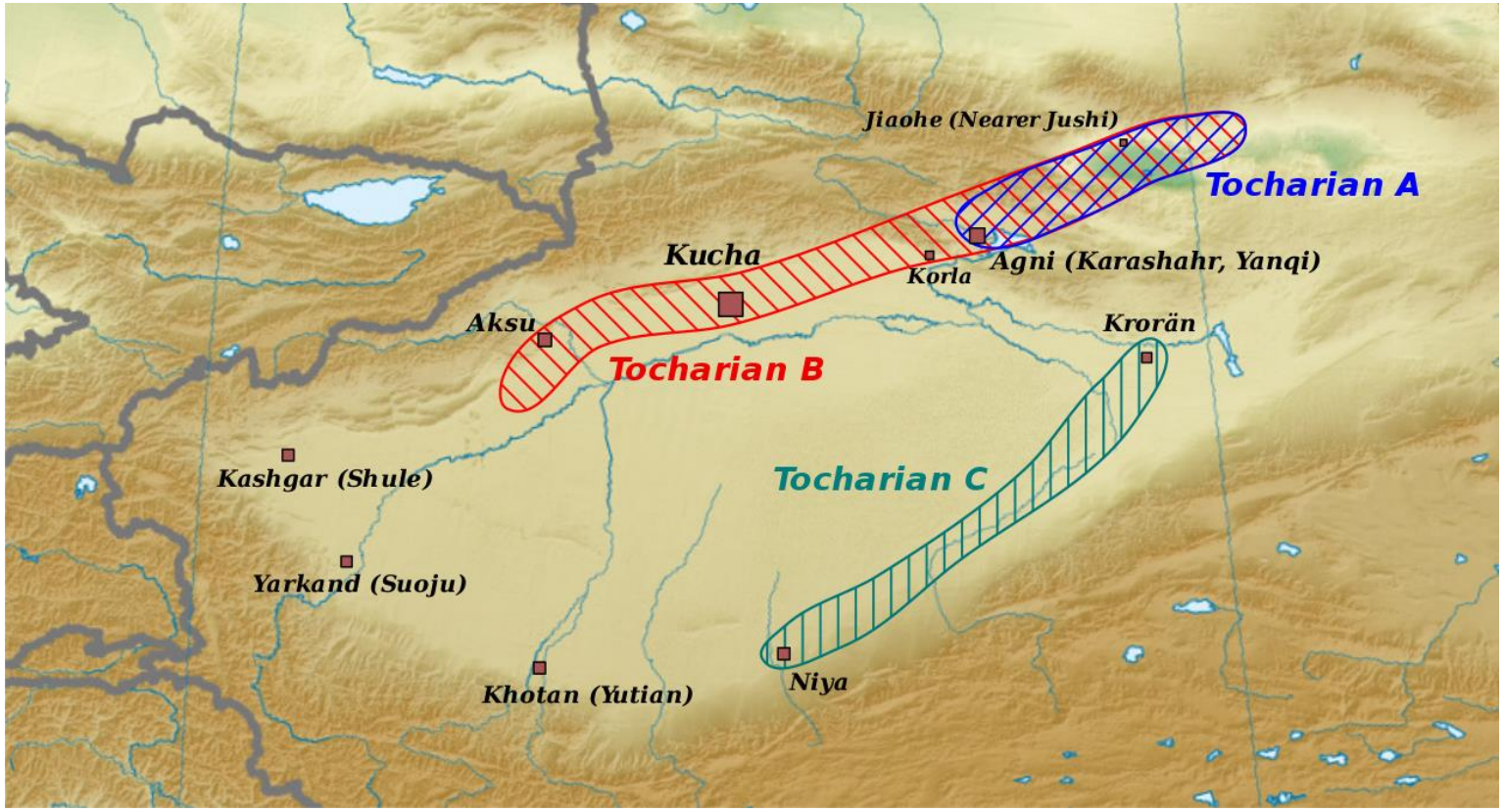
# ENVIRONMENTAL STRUCTURES: OVERVIEW

- Large resistance in topography.
- Naturally isolated oasis towns.
- Farming settlements and pastoralist areas

# THE DISCOVERY OF TOCHARIAN

- Prussian, French, Russian and Japanese expeditions to Eastern Central Asia.
- Identified as an Indo-European language in 1908.
- Two closely related languages: Tocharian A (East Tocharian; Agnean; endonym TA *ārśi*) and Tocharian B (West Tocharian, Kuchean; endonym TB *$k_u$śiññe*).

# HISTORICAL DATA: HAN SOURCE HANSHU (1ST CT. BCE)




Tocharian Languages A, B and C with the oasis towns mentioned in the Hanshu. User Yug - CC BY-SA 3.0.

# Xiongnu, Yuezhi and Wusun in Chinese sources

- ”Barbaric” tribes in the north, Xiongnu 匈奴 (likely Mongolians), and Yuezhi and Wusun.
- Yuezhi 月氏 and Wusun in Gansu: probably Tocharians.
- Yuezhi and Wusun were pushed out of Gansu by the Xiongnu.

European-looking farmers or traders in a Chinese tomb from 2nd c. BCE, Hunan province. From Hunan Provincial Museum. Photo: Gerd Carling

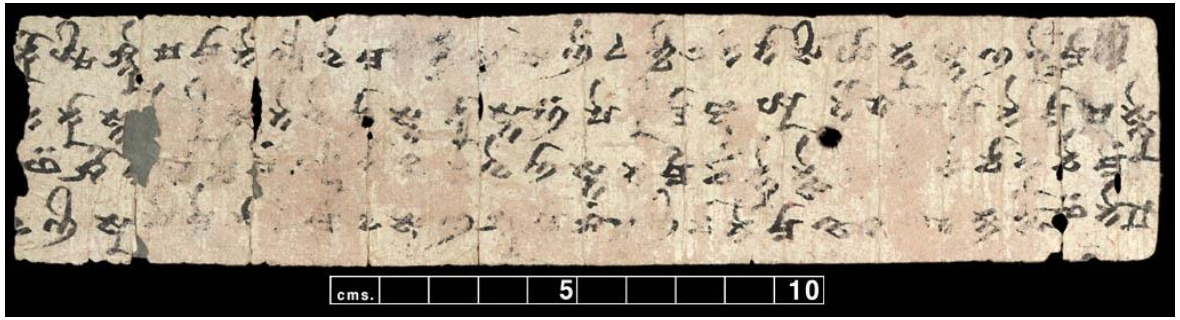
# Who were the Tocharians?

- **Buddhists**
- Tocharian Buddhist monk Kumārajīva (鸠摩罗什 *Jiūmóluóshí*) came around 400 ACE to Chang'an, the capital of the later Qin dynasty.
- Translated Buddhist texts from Sanskrit and Tocharian into Chinese.

Statue of Kumārajīva at Qizil. Photo Gerd Carling

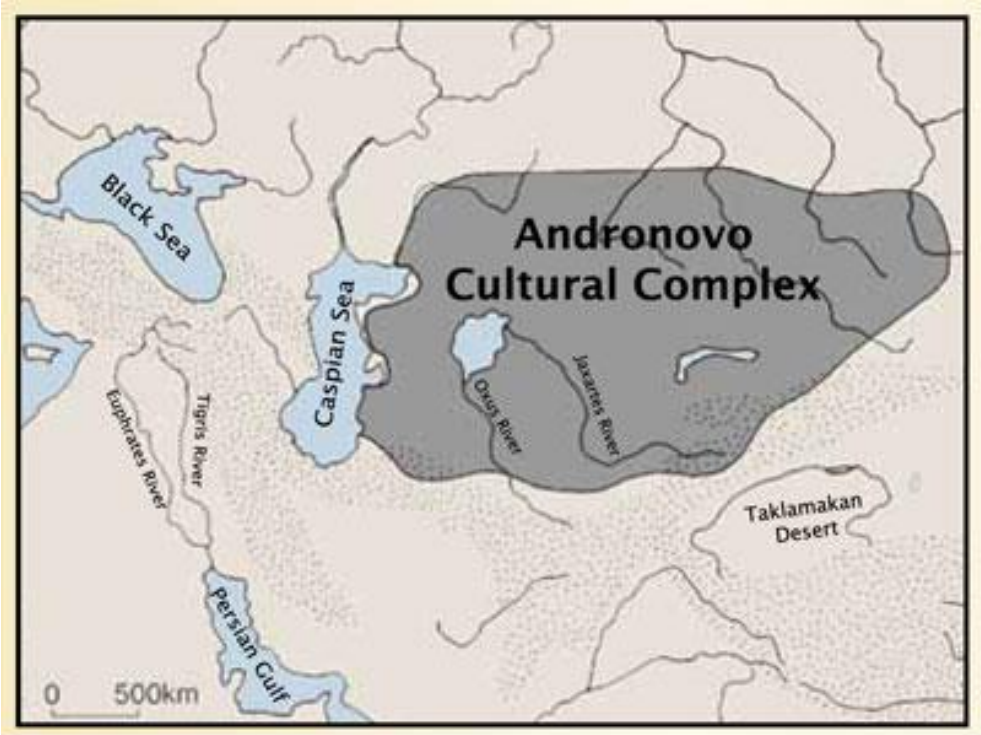
# Who were the Tocharians?

- Warriors
- Farmers
- Traders




IOL Toch 258, bussiness letter in Tocharian B, written in cursive script and demanding payment.
Image source: idp.bl.uk

East meets west at Bezeklik, 9-10th ct. ACE. 'Western' and 'Oriental' monks depicted together. Albert von Le Coq, 1913. *Chotscho*, Berlin, D. Reimer, 21.




Andronovo Cultural complex (2000-900 BCE).
Map by James P. Mallory.


The Afanasievo Culture (3500-2500 BCE).
Map by James P. Mallory.

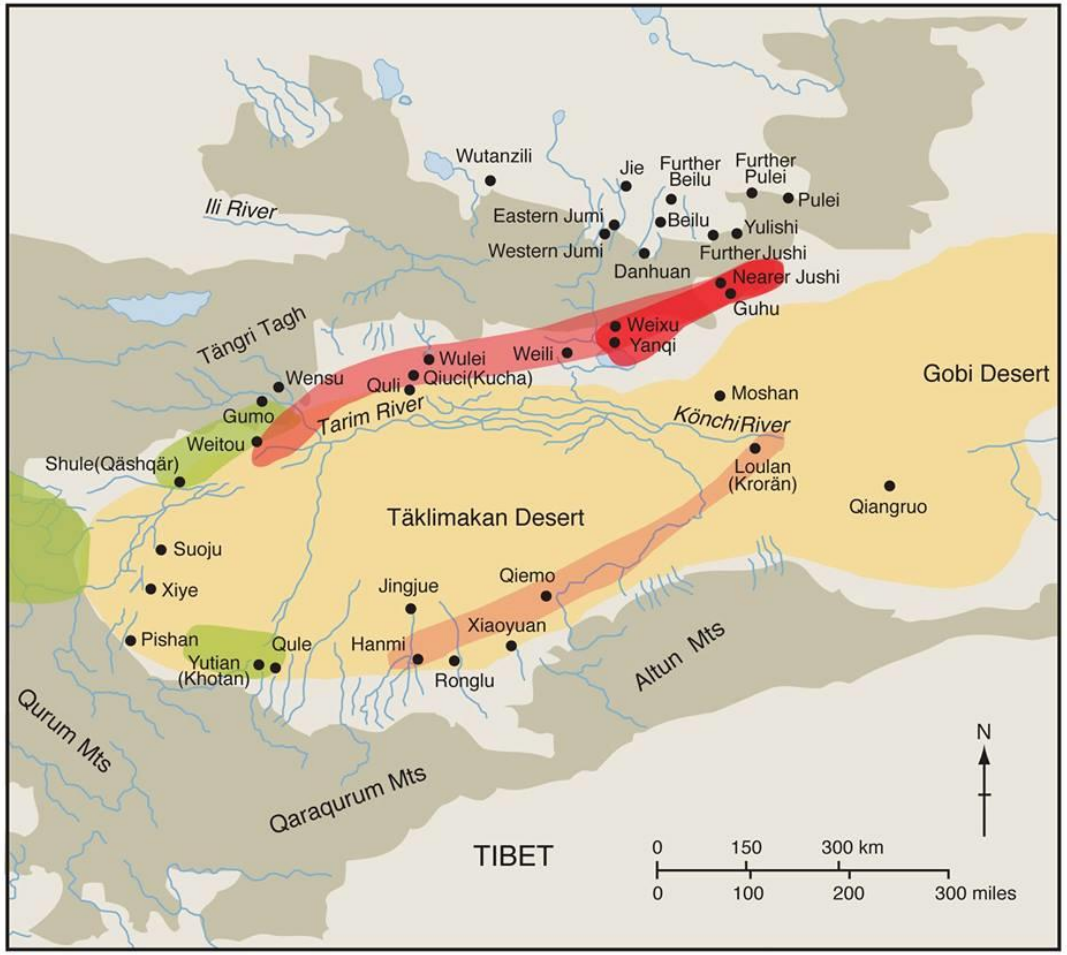
”The witch of Subeshi”

”Cherchen man”


Map of archaeological sites in Xinjiang.
Emily Toner after Victor Mair.

Photos by Jeffery Newbury.

# Location of Tocharian A, B, and C




Map by James P. Mallory.

# LANGUAGE CONTACT

# BMAC LOANS IN TOCHARIAN (AND OTHER LANGUAGES)

- TB *iśceṃ** 'clay, brick', also in TB *iṣcake* < **iścäke* and A **iśäk* (based on Uigh. *išič, išič* 'clay, brick') < CT **is't'äkæ* corresponds to Indo-Iranian, e.g., Vedic *íṣṭakā-* 'brick', Old Pers. *išti,* Mod. Pers. *xišt* 'brick'.

- TB *ṣecake* A *śiśäk* 'lion' and Skt. *siṃha-* (also *siṃhaka-*) 'lion', Mod. Ch. *suānní,* Mid. Ch. **swan+NEi,* Old Chin. **soo[n,r]+Nee* (GSR 46d+873o (873#)) Tib. *se.n-ge* 'lion' vs. Mod. Chin. *shīzǐ,* Mid. Ch. **srij+tsiX,* Old. Chin. **srij+tsə-?* (GSR 559a (559#) 964a) 'lion'.

- TB *kercaṗo* 'donkey, ass' and Skt. *gardabhá-* 'donkey, ass' < **gord(h)ebho-*, taking place before the merger of Indo-Eur. **a, *e, *o* > **a* in Indo-Iranian.

# TURKIC LOANS IN TOCHARIAN

- TA *kanak* B *kenek* ‘cotton cloth’ < Common Toch. **kænæk*, obviously a Turkish borrowing, cf. Chor. *kcynyk* ‘silk fabric’.

- TB *þärśeri** ‘flea’ as borrowed from Turkic also seems convincing, cf. Tat. *börčɛ*, Kum. *bürče* ‘id.’

- A *kattuṃ*, *hkhātuṃ* ‘lady, princess’, from Uigh. *χatun, qatun, xa:tun* ‘queen, wife, lady’ (ATG:336a), also present in Khot. *hqttuna, khattunä*.

# TOCHARIAN LOANS IN CHINESE

- The most certain borrowing from Tocharian to Chinese is the word for 'honey', Toch. B *mīt, mit* < **myit* < **m'ät* < Indo-Eur. **médhu-* 'honey, mead' (IEW:707), Mod. Ch. *mì*, Mid. Ch. **mjit*, Old. Ch. **mit* (GSR 405r) 'honey'. The Middle Chinese reconstruction corresponds precisely to Common Toch. **myit*.

# TOCHARIAN LOANS FROM OLD CHINESE

- Toch. AB *klu* 'rice' was borrowed from Old Chinese: Mod. Ch. *dào*, Mid. Ch. **dawX*, Old Chin. **C-luu-*? 'rice, rice-paddy' (GSR 1078). In Middle Chinese, the initial cluster OChin. **gl-* was simplified to *d-*.

- The derivation of Toch. B *raṗaññe* 'of the last month of the year' (LP 12 a2 *raṗaññe meṃne ikäṃ-wine* 'on the second day of the month rapaññe'), an adjective formed on a noun **rāṗ*, from Old Chinese: Mod. Ch. *là*, Mid. Ch. **laṗ*, Old Ch. **raaṗ* (GSR 637j) 'winter sacrifice'. It is likely that an earlier meaning of the Chinese word is reflected in Tocharian.

- Toch. A *ri* B *rīye* < Common Toch. **riye* matches the Old Chinese reconstruction of Mod. Ch. *lǐ*, Mid. Ch. **liX*, Old Ch. **r̥ə-*? (GSR 978a) 'walled city'. The word may also be a Tocharian loan in Old Chinese.

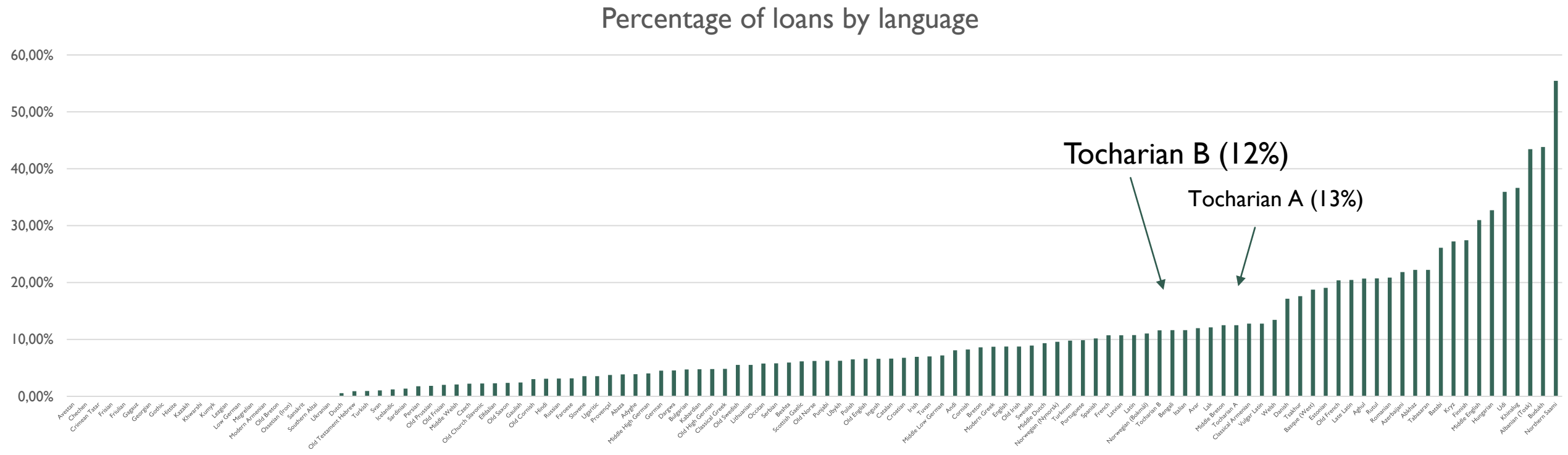
# TOCHARIAN LOANS FROM EARLY MIDDLE CHINESE

- TA *ṣoṣtäṅk* 'tax collector, banker' (Skt. *śreṣṭhin-*) corresponds to Niya *ṣoṭhaṃga* 'tax collector', Bactr. σωταγγο < **šoštaṅgV*. A possible source is Mod. Ch. *shōucáng*, Mid. Ch. **syuw+dzang*, Old. Ch. **xiw-N-s-(h)raŋ* (GSR 1103a+727g´) 'receive, accept, gather' + 'conceal, store'.

- TA *ṣukṣ* '(smaller) village', TB *kwaṣo** 'village'. Parallel Mod. Ch. *sù*, Mid. Ch. **sjuwk*, Old Ch. **suk* (GSR 1029a) 'lodge, mansion'. Itō & Takashima (1996:401) reconstruct Old Ch. **sjəkw-s* with a final *-*s* (that has a function of localisation and production of nomina actionis etc.).

- Toch. A *āṅk** 'seal, stamp', Mod. Ch. *yìn*, Mid. Ch. **ʔjinH*, Old Ch. **ʔin-s* (GSR 1251f), **ʔi̯əŋ* (Takashima) 'seal, stamp'.

# AMOUNT OF BORROWING IN 100 CULTURE TERMS (FARMING, PASTORALISM, TECHNOLOGY, INDUSTRY, HUNTING, WAR)

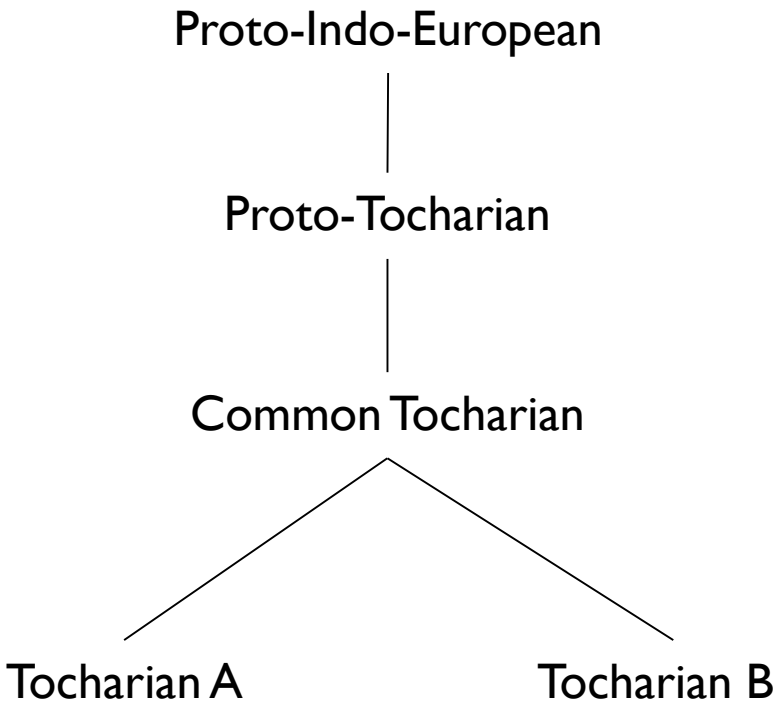


# HOW DO WE KNOW THAT TOCHARIAN IS INDO-EUROPEAN?

- At least 600 safe, Indo-European core etymologies.
- Indo-European inflectional system is preserved.
- Reconstruction of Pre-, Proto- and Common Tocharian phonological systems.

# The position of Tocharian in the Indo-European tree

- Tocharian forms its own branch.
- Second to branch off?
- Same status as other branches?
- Lexical archaisms.
- Phylogenetics.



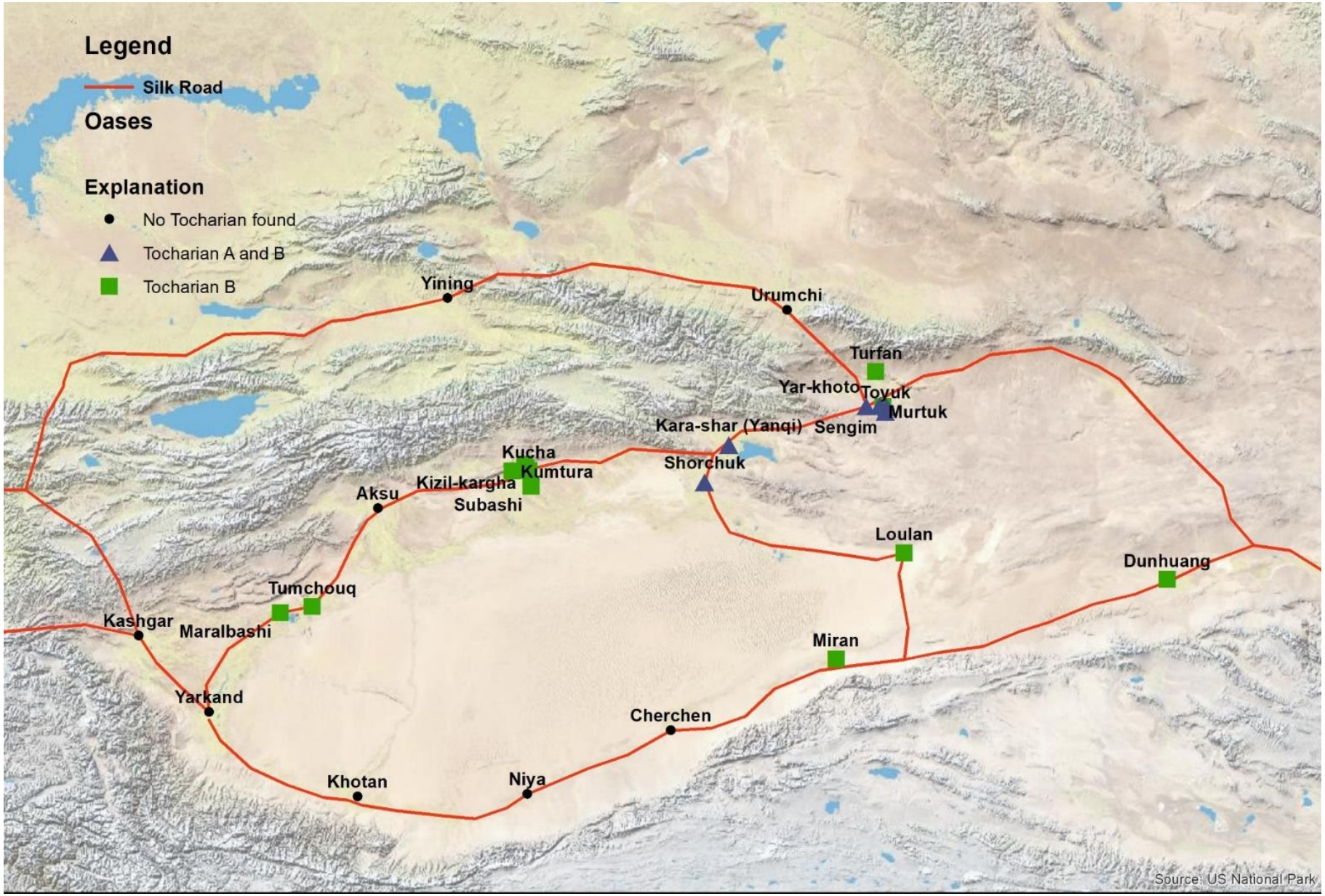
# LEXICAL ARCHAISMS IN TOCHARIAN

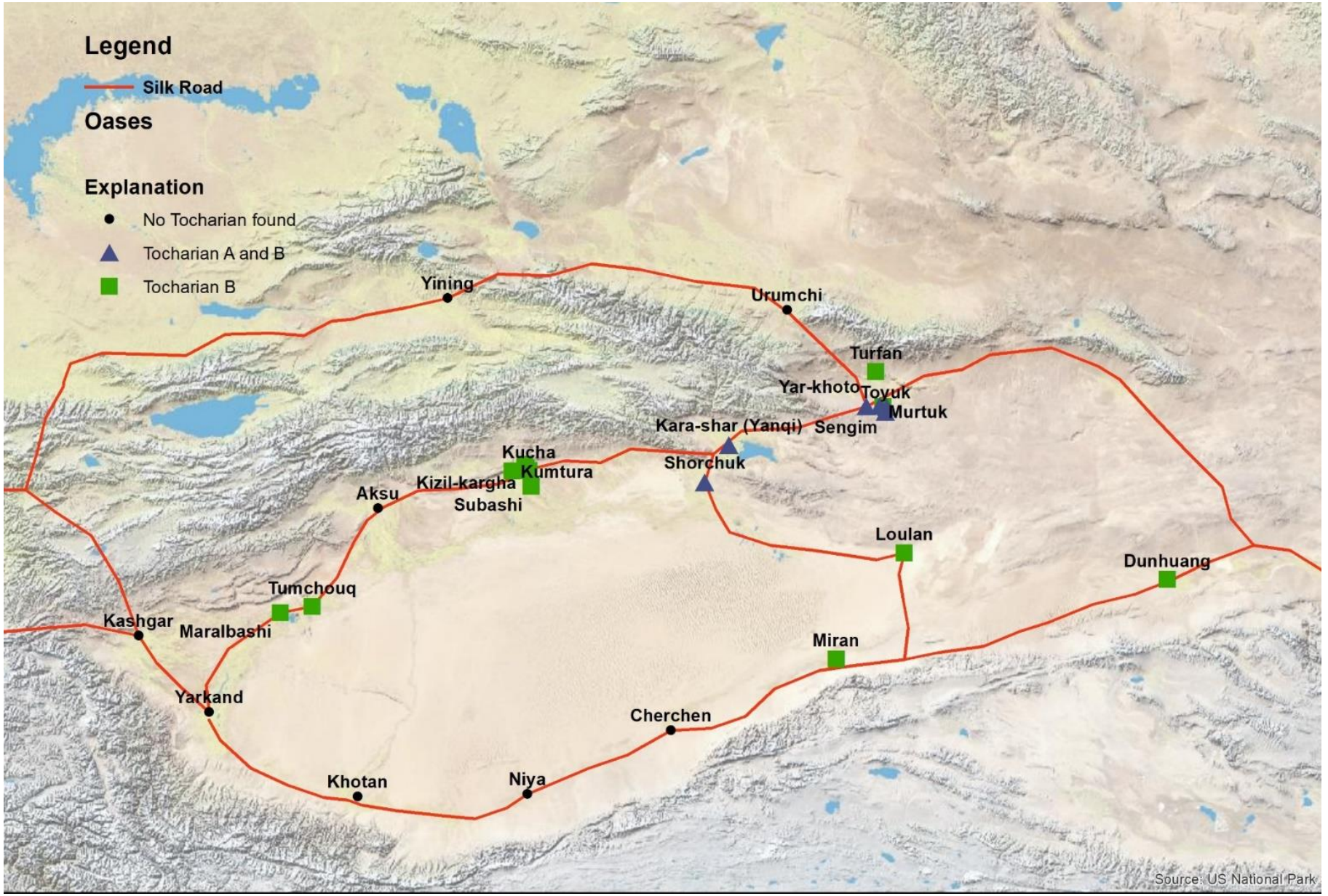
- Toch. AB *yäp-* 'enter', Skt. *yabh-*, Greek *oíphō*, Russ. *ebu* 'have intercourse' < PIE **yebh-* 'enter' (LIV:309) The original meaning of the verb is preserved in Tocharian.

- TB *kärweñe* 'stone, rock', Skt. *grāvan-* 'stone for pressing out soma', Welsh breuan 'handmill', Old Ch. Slav. *žrŭny* 'handmill'.

- TB *śrān-** '(adult) man' < PIE **ǵerh$_2$-ōn*, Skt. *járant-* 'old, fragile', Gr. *géront-* 'geriatric', Oss. *zärond* 'old' < PIE * *ǵerh$_2$-* 'mature, grow' (LIV:165). The meaning 'old', 'geriatric' is an innovation of the non-Tocharian languages.


BEAST densitree, based on basic vocabulary data for Indo-European languages (from DiACL database). Graph by Chundra Cathcart.


Legend
Silk Road
Oases
Explanation
No Tocharian found
Tocharian A and B
Tocharian B
Yining
Urumchi
Turfan
Yar-khoto
Toyuk
Murtuk
Sengim
Kara-shar (Yanqi)
Shorchuk
Kucha
Kumtura
Kizil-kargha
Subashi
Aksu
Loulan
Dunhuang
Tumchouq
Kashgar
Maralbashi
Miran
Yarkand
Cherchen
Khotan
Niya
Source: US National Park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Kashgar
Maralbashi
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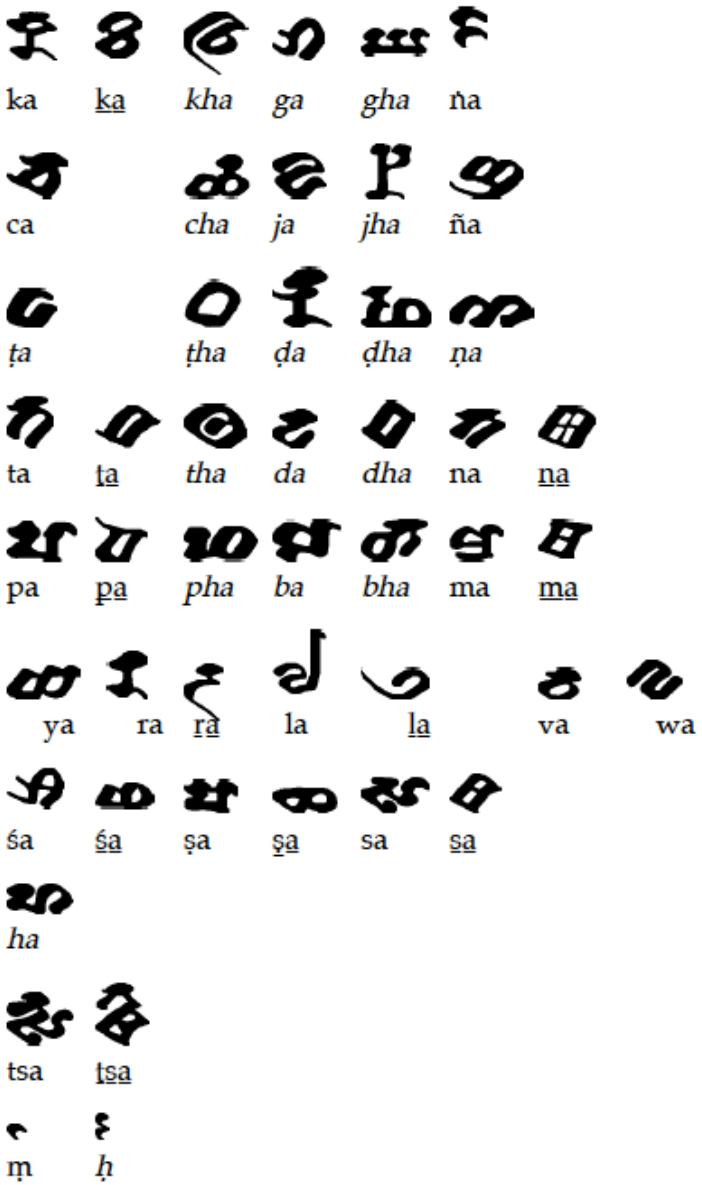
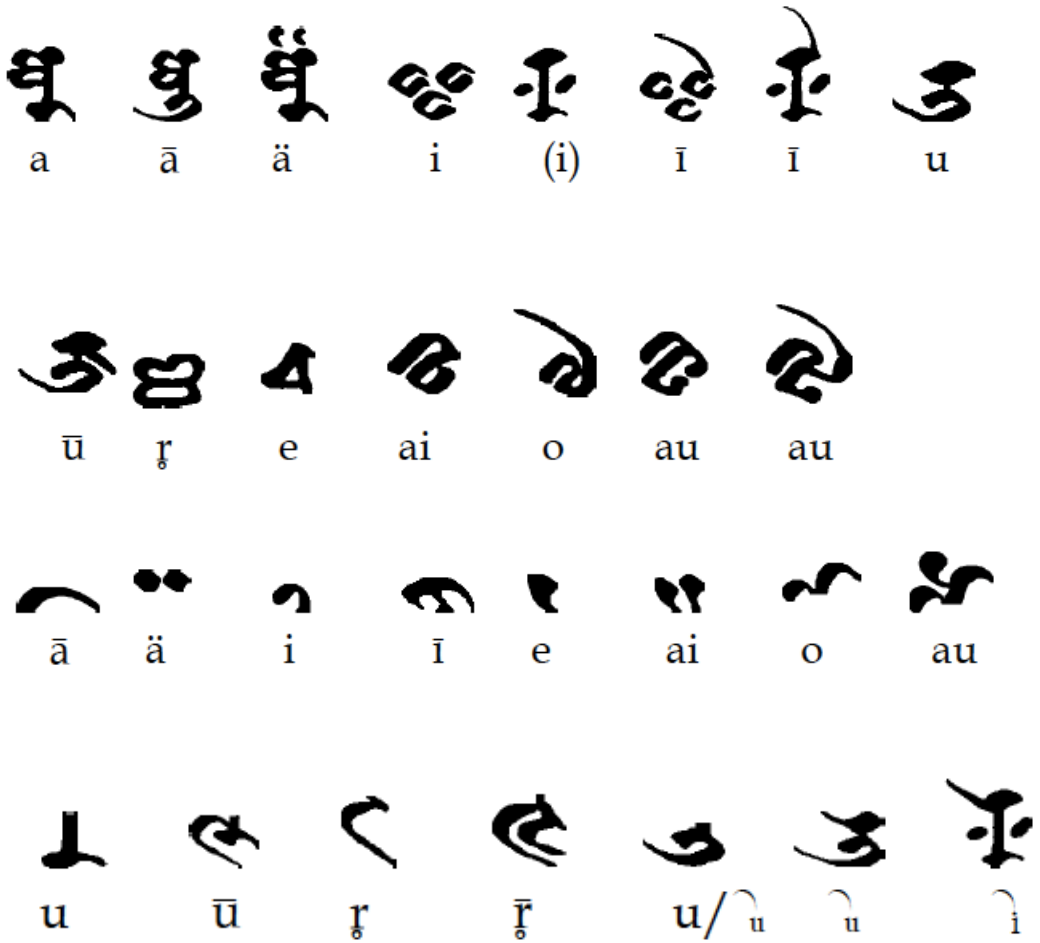
Yarkand
Cherchen
Khotan
Niya
Source: US National Park

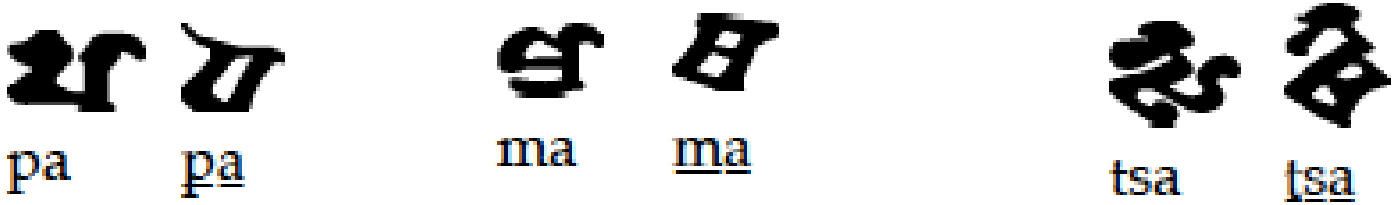
# THE WRITING SYSTEM:

- Variant of the Indic Brāhmī script.
- Gupta script.
- Tocharian addition: ”Fremdzeichen”, in transcription marked as *ä*.
- A number of graphemes are used only for Sanskrit loans.

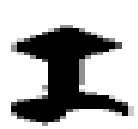

ka ka kha ga gha ṅa
ca cha ja jha ña
ṭa ṭha ḍa ḍha ṇa
ta ṭa tha da dha na na
pa pa pha ba bha ma ma
ya ra ṛa la la va wa
śa śa ṣa ṣa sa sa
ha
tsa tsa
ṃ ḥ

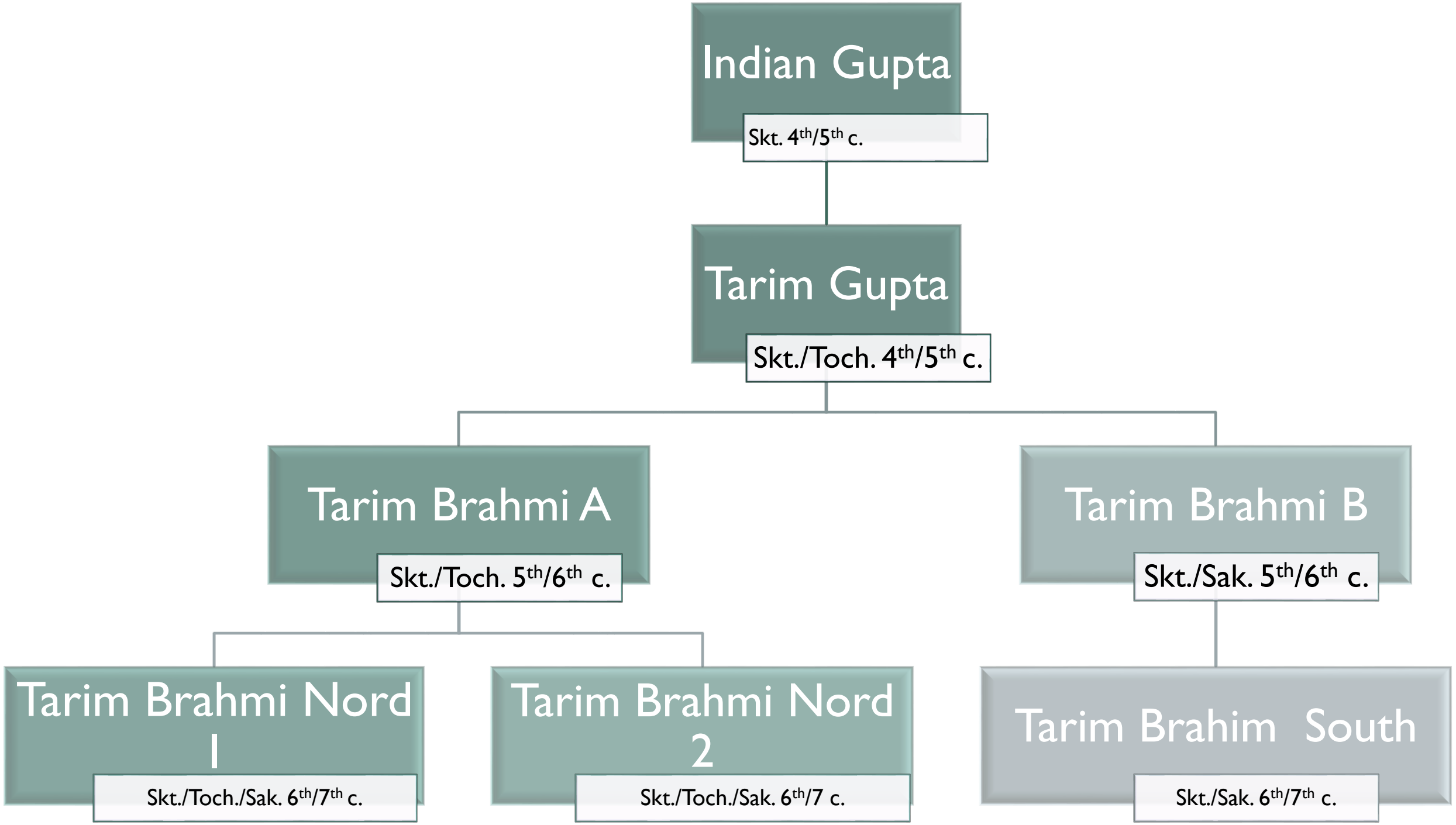

a ā ä i (i) ī ī u
ū ṛ e ai o au au
ā ä i ī e ai o au
u ū ṛ ṝ u/u u i


ta
ṭa
na
n̲a
śa
ś̲a
ṣa
ṣ̲a
sa
s̲a


pa
p̲a
ma
m̲a
tsa
ṭs̲a


ra
r̲a
la
l̲a

| Based on Sander&Malzahn | *a* | *tha* | *ma* | *ra* | *la* |
|---|---|---|---|---|---|
| Tarim Gupta |  |  |  |  |  |
| Tarim Brahmi A |  |  |  |  |  |
| Tarim Brahmi B |  |  |  |  |  |
| Tarim Brahmi North 1 |  |  |  |  |  |
| Tarim Brahmi North 2 |  |  |  |  |  |
| Tarim Brahmi South |  |  |  |  |  |


Indian Gupta
Skt. 4th/5th c.
Tarim Gupta
Skt./Toch. 4th/5th c.
Tarim Brahmi A
Skt./Toch. 5th/6th c.
Tarim Brahmi B
Skt./Sak. 5th/6th c.
Tarim Brahmi Nord 1
Skt./Toch./Sak. 6th/7th c.
Tarim Brahmi Nord 2
Skt./Toch./Sak. 6th/7 c.
Tarim Brahim South
Skt./Sak. 6th/7th c.

# DATING OF TOCHARIAN TEXTS

1. Precise dating in texts from the first half of 7$^{th}$ century CE.

2. C14 dating.

3. Chronological dating: MQ-writing.

# Dating of Tocharian texts: precise dating

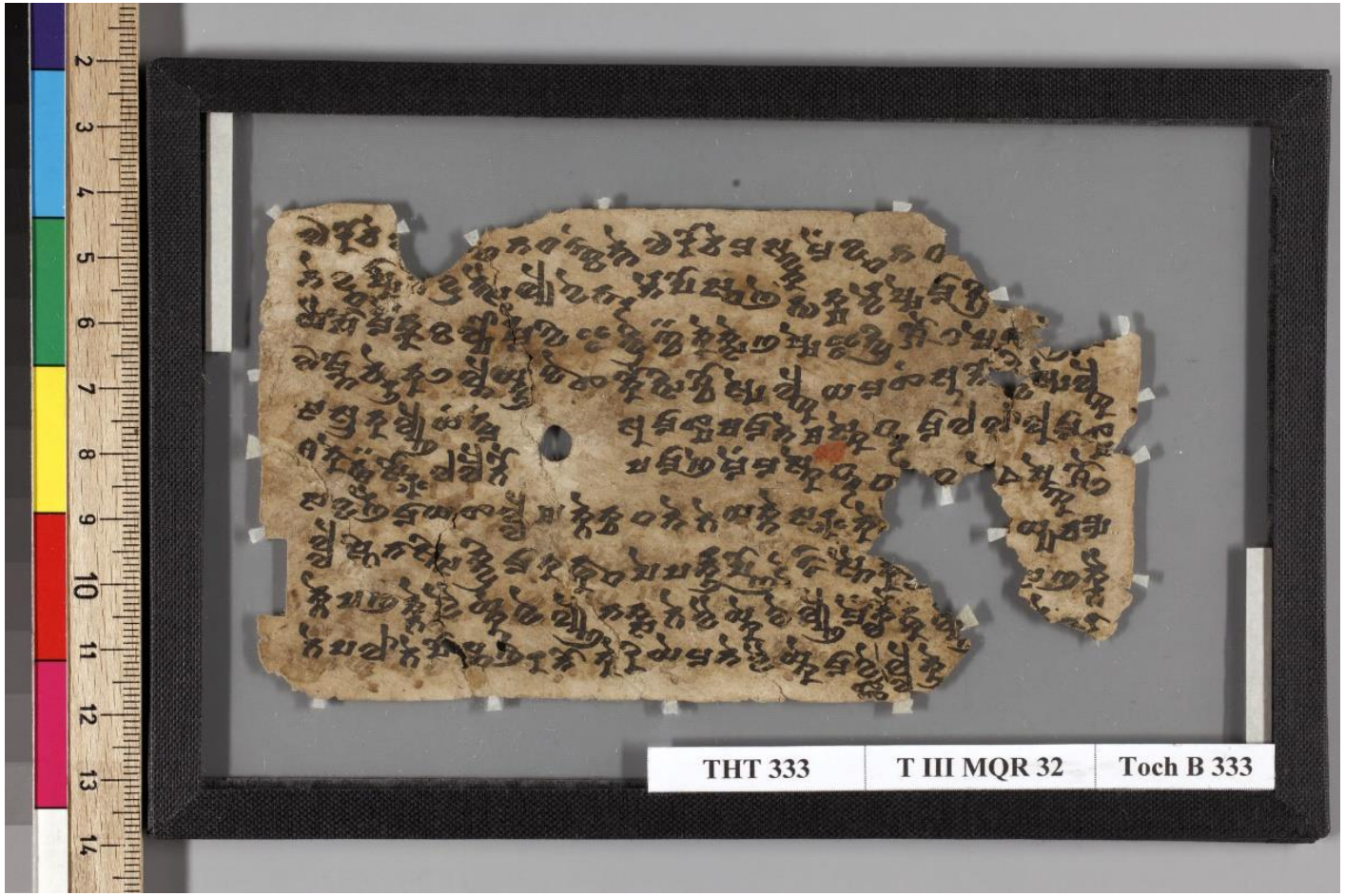
- Tocharian B text from the King Swarnatepe (Pinault 1987)

PK Bois B 25

| | | |
|---|---|---|
| **a1** | [ika]ṃ ṣe kṣuṃntsa piṅkce [meṃ]ne [i] /// | • during the 21st year, in the 5th month … |
| **a2** | oroccepi lānte swarnatepi kṣ(u)ṃ[n](e) /// | in the year of the great king Swarnatepe |
| **a3** | [r]e [ā]k(ṣ)a • /// | |

# Dating of Tocharian texts: C14

- C14 dating dates texts:
- Tocharian B 400-900
- Tocharian A 700-1000
- (Tamai 2005)

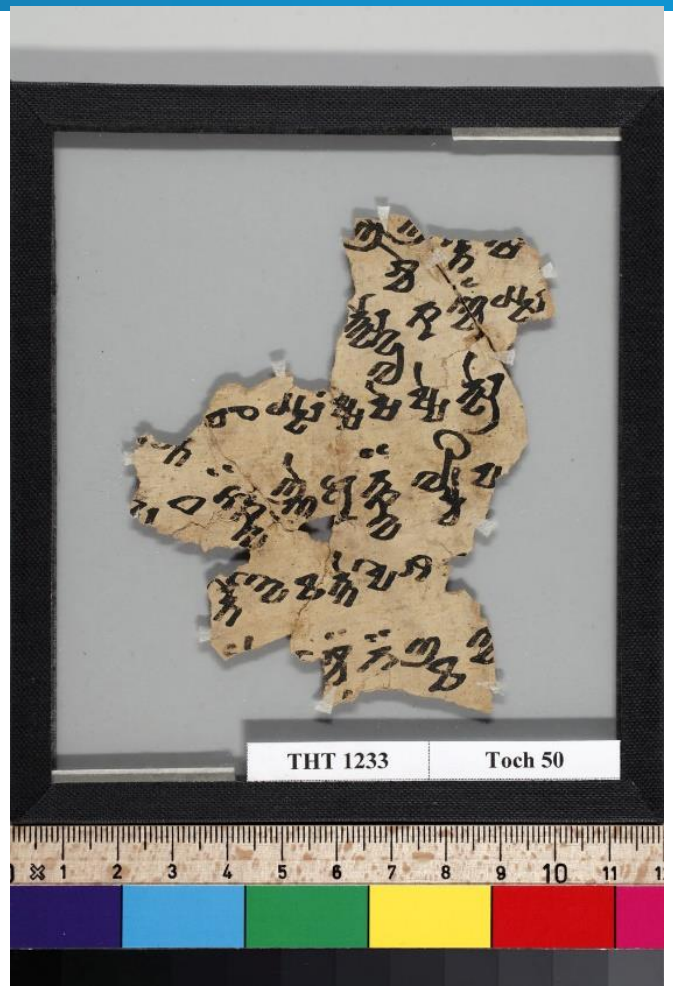



THT 333 (=TB, Vinayavibhaṅga), by C14 dated between 394-473
(Malzahn 2011-2018)(Tamai 2005)
Image source: idp.bl.uk

# Dating of Tocharian Texts: MQ-writing

- Most archaic texts in Tocharian B are much less uniform with respect to language and ductus.

- MQ-writing (Malzahn 2007).




THT 1233, containing MQ features
(Malzahn 2011-2018)
Image source: idp.bl.uk

# THRE TOCHARIAN CORPUS

- Manuscripts and wallpaintings, from 4-1100 AD, with Buddhist content.
- Found in cave monasteries and in the desert sand in Eastern Turkestan.
- Tocharian A: basically literary texts.
- Tocharian B: all kinds of texts.
- Total number of fragments: around 7600.
- Many very fragmentary!

# LOCATIONS OF DOCUMENTS

1. Berlin collection (Staatsbibliothek zu Berlin): Prussian expeditions, edited by Emil Sieg and Wilhelm Siegling 1921.
2. Paris (Bibliothèque Nationale): Pelliot expeditions, edited by Sylvain Lévi, Jean Filliozat, Walter Couvreur, Georges-Jean Pinault.
3. London (British Library): Aurel Stein, around 1500 texts, published by Broomhead 1964, photos at International Dunhuang Project.
4. St. Petersburg: few publications, e.g., Pinault 1998.
5. Tokyo: Otani Collection.
6. Qizil.
7. Ürümqi (Regional Museum of the province of Xinjiang): Yanqi manuscripts of MSN.

# Documents: Literary and religious contents

- **Tocharian A and B:**
- Monastic disciplines (Vinaya)
- Doctrinal texts (Sūtra)
- Law reflections (Abhidharma)
- Narrative texts
- Stories from the births and past lifes of Buddha (Jātaka, Avadāna)
- Drama (Nāṭaka)
- Poetry, epic (Kāvya), Lyric (Stotra)
- Science and technique
- Grammar, astronomy, medicine, dream interpretation, writing excercises
- Manichean literature

**Parallel texts in:**

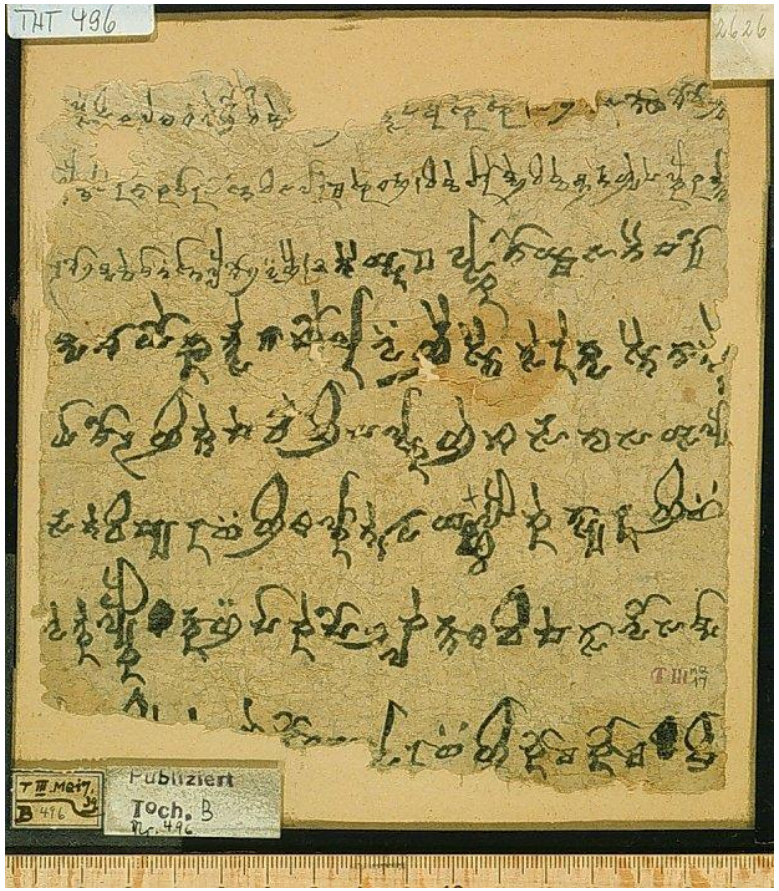
- Sanskrit/Buddhist Sanskrit (Vinaya, Sūtra, Abhidharma, medical texts, Jātaka, Avadāna, Kāvya, Stotra, grammar, astronomy, medicine, dream interpretation)
- Uighur (MSN)
- Chinese
- Khotanese
- Tibetan

# DOCUMENTS: PROFANE CONTENTS

- Historic documents
- Economic, administrative, juridical documents
- Monastery letters, bussiness letters, processes, caravan passports
- Graffiti and inscriptions
- Glosses (basically in Sanskrit texts)

# TEXT SAMPLE 1: THE 'LOVE LETTER'

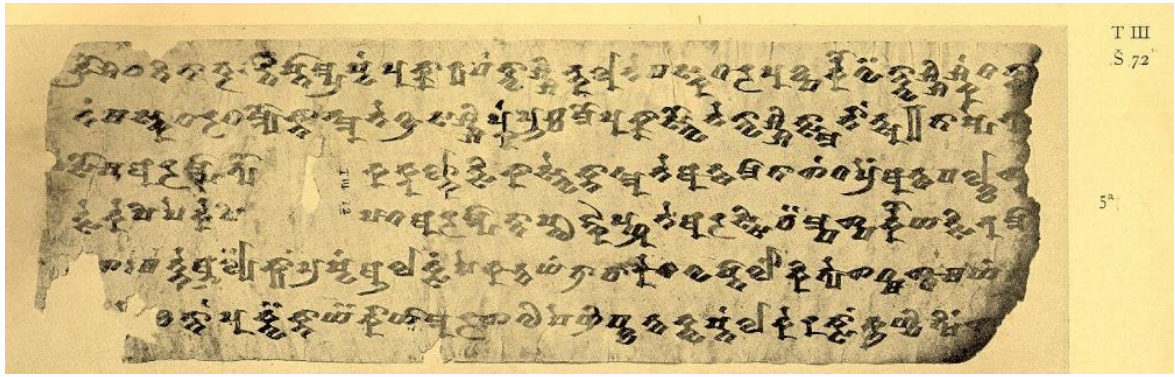
... (ya)-
a1 -ltse pikala watäṃ ( ·)e (–) ci(ṣṣ)e /// /// (– –) ( ·)nts( ·) p(o)
ask(a)sk(au) (mā) ñ(i ci)sa noṣ śomo ñ(e)m
a2 (wno)lme (l)āre tāka mā ra postaṃ cisa lāre mäsketär-ñ : ciṣṣe
laraumñe ciṣṣe ārtañye pelke kaltta-
a3 -(r)r śolämpa ṣṣe mā t(e) stālle śol wärñai : 2 taiysu pälskanoym
sanai ṣaryo-
a4 -mpa śāyau karttse(ś) śaulu-wärñai snai tserekwa snai tā – :
a5 yāmor-ñīkte ṣe cau ñī palskañe śarsa tusa ysaly= e-
a6 -rsate ciṣy= araś ñi sälkāte : wāya ci lauke tsyāra ñiś
a7 wetke «k»ly«†k»autka-ñ pāke po läklenta«nt»s ciṣe tsārwo sampā-
a8 -(te-ñ) – – – – – (–) ·e śol pals(k)= araś ñī kom-kom mī-




THT 496, Literary, Tocharian B, from Qizil Miŋ-Öy.
(Malzahn 2011-2018)
Image source: idp.bl.uk

# TEXT SAMPLE 2: THE STORY OF THE MECHANICAL DOLL

A5 (THT 638), Literary, Tocharian B,
from Qizil Miŋ-Öy.
(Malzahn 2011-2018)
Image source: idp.bl.uk




a1 krośavati tāträ«sku»s tāṣ tām praṣṭaṃ puk kāryapäṃtwāśśi nkalune mäskatär puk pärkowäntwāśśi śkaṃ sätkā(lu)-
a2 -ne mäskatär tämyo knānmune wrasaśśi pukaṃ pruccamo puk kāswonen«t»wāśśi tsmār nāṃtsu || tāṣ penu (wra)-
a3 -som arämpātyo kaknu lkātsi kāswe knānmune ats mā tāṣ-äṃ täpreṃ ats pälkäṣ (m)äṃ(t ne)
a4 tsekeṣi pekeṣi pat arämpāt tāṣ tuṅ= kāpñune arässi cämpäṣ pärko yatsi nu mā (cä-
a5 -mpä)ṣ : mäṃt ne ālyäkyāṃ praṣṭaṃ ālak saṃ pekant yaṃtrācāres waṣṭā lokit yeṣ tmäṣ säm yaṃtrā(cā-
a6 -re) (pe)käntāṃ puk wäknā yärkā yāmuräṣ oṣeñi pkäntäk waṣtaṃ lake raksā-ṃ kuñci{t}ṣiṃ ṣä(lyp-
b1 -aśśäl) (orṣ)ṣāṃ yantärṣināṃ śomināṃ śkaṃ la{p}äṣ lyalymā-ṃ sām cami śla wäktasurñe oki kāwält(une yä-
b2 -rkā) yāmäl yo tsaraṃ eṃtsus paṃ ypā-ṃ täm nu mänt wäknā || ṣāmnernaṃ || proṣmiṃn oki sām tsru ṣät lkā(māṃ)
b3 śāri lyāk : mätsratsi oki mā plāc crańkäs mā karyā : śla tuṅk oki nu räsñā poke (paṃ)
b4 ypamāṃ : pontsāṃ kapśiññäṣ omlyi wikṣā pekäntāp : l || tmäṣ säm pekant äkntsu(ne)-
b5 -yo tām orṣināṃ śominānaṃ yneś śomiṃṣiṃ ime kälpo āñmaśl-äkk ats pältsäṅkäṣ o(te tä)-
b6 -preṃ kāwältune ote täpreṃ kuleñciṃ mäsratsuneyo proṣmune

# SOURCES FOR STUDYING TOCHARIAN: ELECTRONIC CORPORA

**A Comprehensive Edition of Tocharian Manuscripts**

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print

## Tocharian and the Tocharians

**English** | Deutsch | Français | Русский | 中文 | 日本語

The Silk Road, the famous network of trade routes connecting China to the West, was essential not only for the transfer of material goods, but also for the exchange of language and culture. Along with many other Central Asian civilizations, Tocharian A and Tocharian B could so come to flourish as literary languages in the wake of the spread of Buddhism in the middle of the first millennium CE.

Qizil grottoes, Kucha region

Although Tocharian was spoken in Kucha and Turfan along the northern edge of the Tarim Basin in North-West China (= present-day Xinjiang), it is not related to Chinese. Instead, Tocharian A and Tocharian B constitute a separate branch of the so-called Indo-European language family, which comprises ancient languages such as Latin, Greek and Sanskrit, as well as modern languages like English and Spanish.

Tocharian manuscript (IOL Toch 1)

Towards the end of the first millennium, Tocharian became extinct: it is now only known from documents that could be preserved over a period of more than 1000 years thanks to the arid climate of the Taklamakan Desert. The documents were discovered during a series of archaeological expeditions undertaken from the end of the nineteenth century onwards, and transferred to museums in China, Japan, and Europe.

Through the decipherment of these thousands of manuscripts precious insights into the civilization of the speakers of Tocharian can be gained: on the one hand, profane documents give information about every-day life; on the other hand, Buddhist religious and scientific texts are evidence of a highly developed literary culture.

It is the aim of our project to make all Tocharian texts available to everyone interested, by providing photographs, text transcriptions, and English translations with a commentary on the respective linguistic, philological, and cultural aspects. The text material is made accessible through a database with various search

Thesaurus Indogermanischer Text- und Sprachmaterialien

# TITUS

## Tocharian Manuscripts
### from the Berlin Turfan Collection

This is a preliminary internet edition of the Tocharian manuscripts that are preserved in the Staatsbibliothek zu Berlin - Preußischer Kulturbesitz as part of the Turfan collection of the Berlin-Brandenburgische Akademie der Wissenschaften. For using the manuscript images as sources in any kind of publication please contact the Oriental Department of the Staatsbibliothek zu Berlin .

The data as available from this server consist of both digitized images and texts (transcriptions were prepared by Christiane Schaefer, transliterations by Tatsushi Tamai, digitizing and transliterations by Katharina Kupfer). For the time being, only parts of the collection can be made available.

Tocharica: text with manuscript images (in frames)

Tocharica: text with manuscript images (formular)

Tocharian texts within the TITUS Corpus

Tocharian texts: complete catalogue arranged by THT numbers (text only)

**Tocharian A**
Tocharian A: catalogue arranged by THT numbers (text only) (220 kb)

HTML version (UTF-8) available (TITUS members only; in frames)
WordCruncher version available

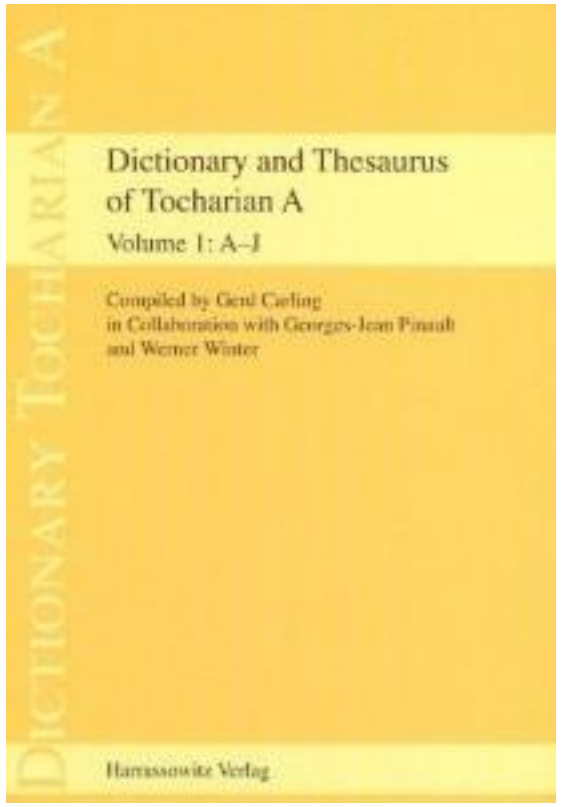
**Tocharian B**
Tocharian B: catalogue arranged by THT numbers (text only) (360 kb)

HTML version (UTF-8) available (TITUS members only; in frames)
WordCruncher version available

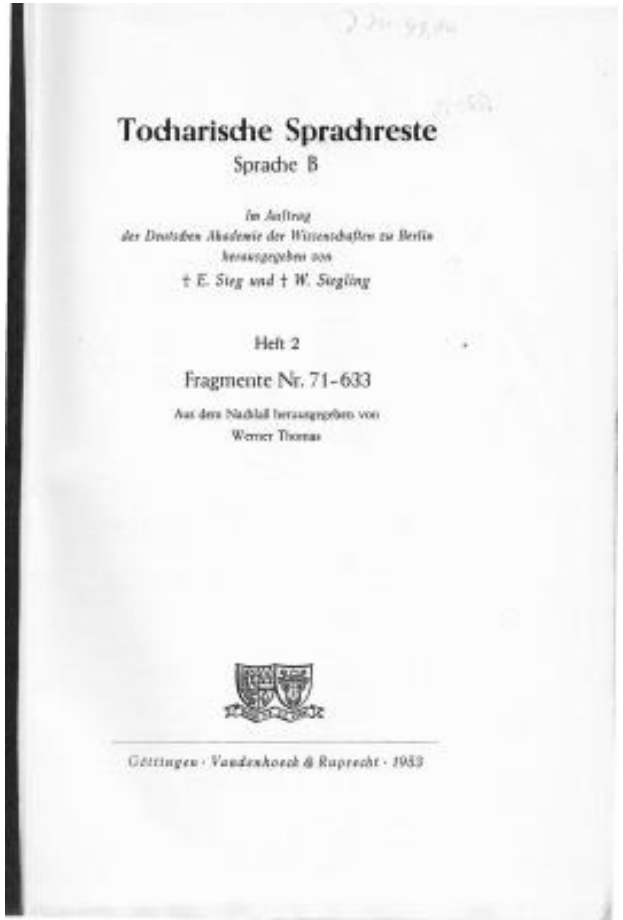
Conventions of transcription

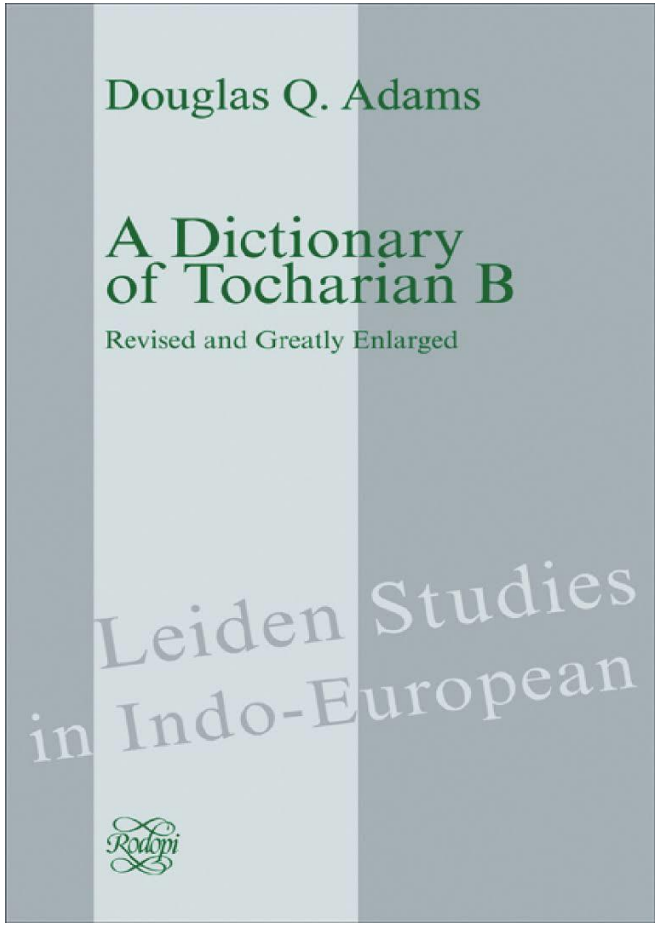
Technical description

# Sources for studying Tocharian: Texts and Dictionaries Tocharian A

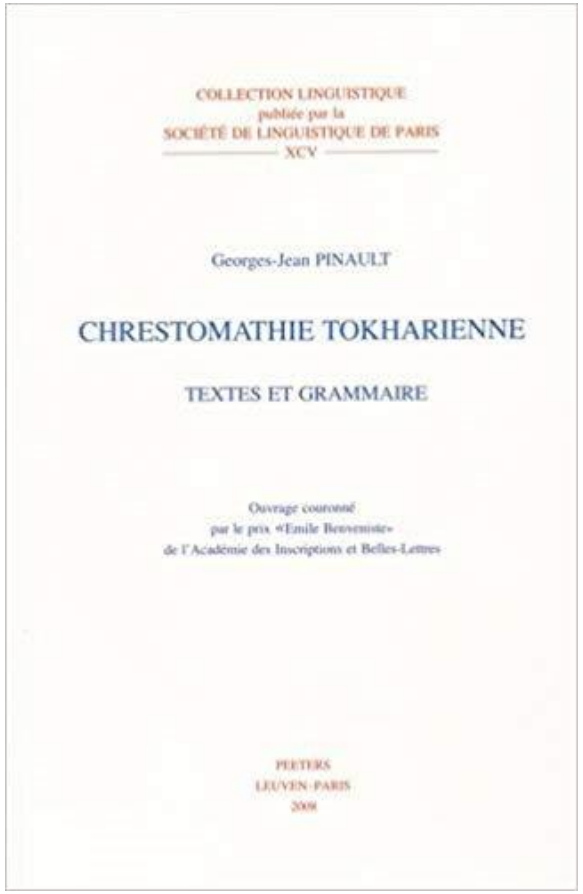



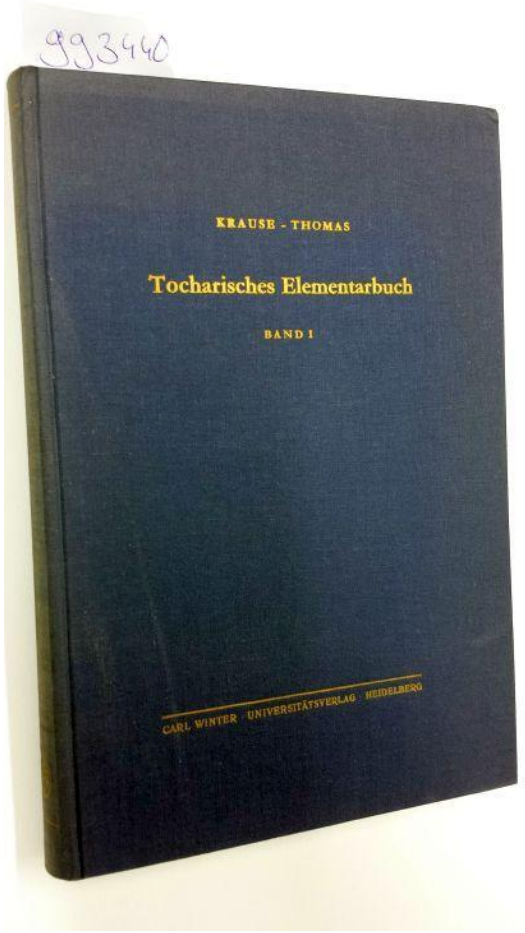

# Sources for studying Tocharian: Dictionaries Tocharian B

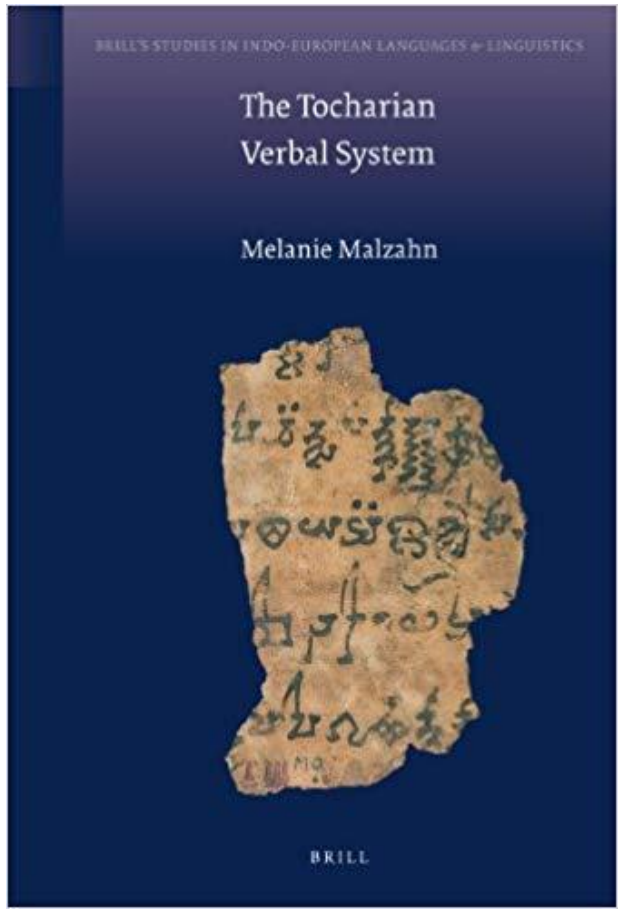



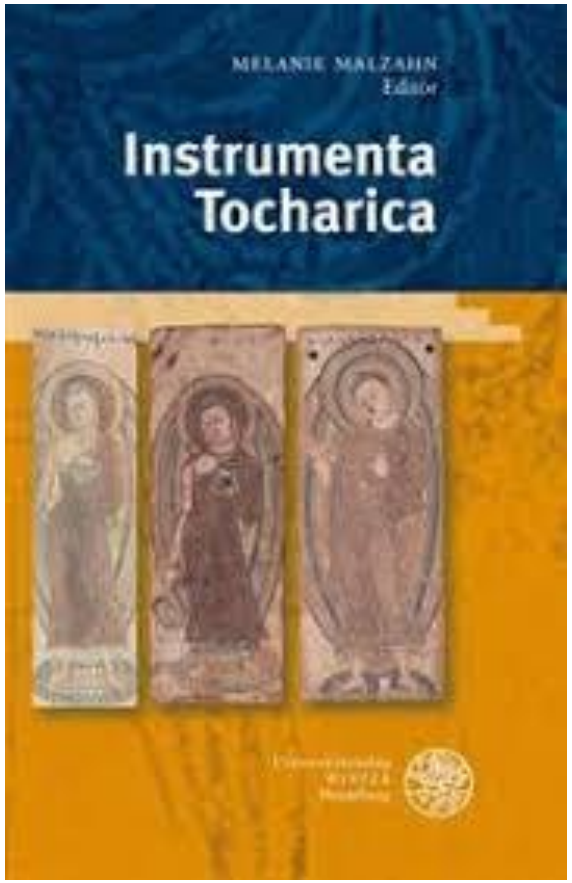
# SOURCES FOR STUDYING TOCHARIAN: GRAMMARS



# Other important resources



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