

**An Attempt at a Selected and Annotated
Bibliography of Tocharian-Turkic Language Contacts,
Part I**

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Abstract

Tocharian-Turkic language and ethnic relations have many unknown aspects and many problems awaiting solutions. One of the fundamental questions about Tocharian-Turkic language contacts is undoubtedly when and where these contacts began and how long they lasted. This problem has long intrigued scholars. As Sarah G. Thomason (2001) also remarks, there are “two crucial historical questions about language contact situations - how they come about in the first place, and how long they last.” And as she notes, “even partial answers to these questions will be useful for orientation and predicting the future of current contact situations with some degree of confidence.” Therefore, even the partial answers we provide to the problem of Tocharian-Turkic language contacts will make significant contributions to its resolution. Thus, this bibliographic essay serves this purpose.

In this first part, the study tries to summarize and describe the significant problems related to the question in the studies listed below and explain what each study is about. The study attempts to evaluate the data included in them, such as lexical correspondences, reconstructions, hypotheses, proofs, and their strengths and weaknesses. However, in this study, not all the studies listed below were evaluated, but only some of them for now. The rest will be evaluated in detail in the next parts of this article series.

Key Words: Tocharian, Old Turkic, loanwords, language contact, historical linguistics, annotated bibliography

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Özet: Tohar-Türk Dil İlişkileri Üzerine Seçilmiş ve Açıklamalı Bir Kaynakça Denemesi, Bölüm I.

Tohar-Türk dil ve etnik ilişkilerinin birçok bilinmeyen yönü ve çözüm bekleyen birçok sorunu vardır. Toharca-Türkçe ilişkileriyle ilgili temel sorulardan biri, şüphesiz bu temasların ne zaman ve nerede başladığı ve ne kadar sürdüğüdür. Bu sorun uzun süredir bilim insanlarının ilgisini çekmektedir. Sarah G. Thomason'un (2001) da belirttiği gibi, "dil teması durumlarına ilişkin iki önemli tarihsel soru vardır: Bu durumlar ilk etapta nasıl ortaya çıkar ve ne kadar sürer." Yine onun belirttiği gibi, "bu sorulara verilecek kısmi cevaplar bile, güncel temas durumlarının geleceğini bir dereceye kadar güvenle tahmin etmek ve öğrenmek için faydalı olacaktır." Dolayısıyla, Tohar-Türk dil ilişkileri sorununa vereceğimiz kısmi cevaplar bile bu sorunun çözümüne önemli katkılar sağlayacaktır. İşte bu kaynakça çalışması da bu amaca hizmet etmektedir.

Bu ilk bölümde, aşağıda listelenen araştırmalarda ele alınan, konuya ilişkin önemli sorunlar özetlenmeye ve açıklanmaya çalışılmakta, her bir çalışmanın neyi incelediği belirtilmektedir. Bu çalışma, söz konusu çalışmalarda yer alan verileri, örneğin sözcüksel denklilikleri, yeniden kurgulamaları, varsayımları, kanıtları ve bunların güçlü ve zayıf yönlerini değerlendirmeye çalışmaktadır. Ancak, bu çalışmada aşağıda listelenen tüm çalışmalar değerlendirilmemiş, şimdilik sadece bazıları ele alınmıştır. Geri kalanlar, bu makale serisinin devamında ayrıntılı olarak değerlendirilecektir.

Anahtar sözcükler: Toharca, Eski Türkçe, alıntı sözcükler, dil ilişkisi, tarihsel dilbilim, açıklamalı kaynakça

Introduction:

This study is part of my research aiming to clarify the Turkic background of Tocharian-Turkic language contacts. I try to solve the fundamental questions of Tocharian-Turkic language contacts from the perspective of Turkic historical linguistics. To do this, it is necessary to recognize the previous studies on this subject and their results. Thus, this bibliographic essay serves this purpose. Although I cannot claim that the list I have prepared is complete, I can

confidently say that it covers the most important and fundamental studies on Tocharian-Turkic relations. Since this is the first part, the shortcomings and studies I may have missed will undoubtedly be addressed in the continuation of this article series.

I tried to summarize and describe the significant problems related to the question in the studies below and explain what each study is about. I have attempted to evaluate the data included in them, such as lexical correspondences, reconstructions, hypotheses, proofs, and their strengths and weaknesses.

Thus, the evaluation of the literature related to Tocharian-Turkic language contacts can greatly contribute to the partial clarification of the nature, place, and time of linguistic and interethnic contacts, as well as a better understanding of these issues.

1. Selected Bibliography

- Aalto, Pentti (1964): Word-pairs in Tokharian and other languages. *Linguistics* 5, 69–78.
- Abdurashid, Ablikim (2006): Das Tocharer-Problem in der chinesischen Forschung. *Ural-Altäische Jahrbücher*, Neue Folge 20, 125–145.
- Adams, Douglas Q. (1988): *Tocharian Historical Phonology and Morphology*. American Oriental Series 71. New Haven: American Oriental Society.
- Adams, Douglas Q. (2013): *A Dictionary of Tocharian B: Revised and Greatly Enlarged*. New York – Amsterdam: Rodopi.
- Aydemir, Hakan (2011): Kâşgarlı Mahmud ve “Uygurların İkinci Dili” Üzerine. In: Hayatı Develi / Mustafa S. Kaçalın / Filiz Kırıl / Mehmet Ölmez / Tülay Çulha (ed.): *Doğumunun 1000. Yılında Kâşgarlı Mahmut ve Eseri Sempozyumu*. İstanbul: Eren Kitapçılık, 395–405.
- Aydemir, Hakan (2013): Tocharian Ethnotoponyms and Ethnohydronyms in Xinjiang. *Dil Araştırmaları* 13, 73–92.
- Aydemir, Hakan (2014): Sogdian Traces in Central-Asian Onomastics. *Gazi Türkiyat* 15, 53–66.

- Aydemir, Hakan (2019): The Reconstruction of the Name Yuezhi 月氏/月支. *International Journal of Old Uyghur Studies* 1(2), 249–282.
- Aydemir, Hakan (2020): Orhon Yazıtlarındaki “Tokuz Ersin / Ersen” Adı Üzerine. In: Kürşat Yıldırım (ed.): *Tonyukuk Kitabı Bilge Tonyukuk Yazıtı’nın Dikilişinin 1300. Yılı Unesco 2020 Bilge Tonyukuk Yılı Anısına*. İstanbul: Türk Ocakları İstanbul Şubesi, 207–220.
- Aydemir, Hakan (2021): *Türk Tarihinin Kaynakları Olarak Eski Türk Boy Adları. Kökenbilgisel Bir İnceleme*, Cilt 1. Çanakkale: Paradigma Akademi Yayınevi.
- Aydemir, Hakan (2023): Tocharian Bilingualism, Language Shift, and Language Death in the Old Turkic Context. *Sino-Platonic Papers* 337, 1–89.
- Bailey, Harold W. (1937): Ttaugara. *Bulletin of the School of Oriental Studies, University of London* 8(4), 883–921.
- Bjørn, Rasmus G. (2022): Indo-European Loanwords and Exchange in Bronze Age Central and East Asia. *Evolutionary Human Sciences* 4(e23), 1–24.
- Blažek, Václav (2005): Tocharian A *kuli*, B *klyiye* “woman” < **ǵ/gleH₂ui-H₁en-?* *Historische Sprachforschung* 118, 92–100.
- Blažek, Václav (2008): Tocharians. Who they were, where they came from and where they lived. *Lingua Posnaniensis* 50, 47–74.
- Blažek, Václav / Schwarz, Michal (2017): *The Early Indo-Europeans in Central Asia And China. Cultural relations as reflected in language*. Innsbruck: Institut für Sprachen und Literaturen der Universität Innsbruck, Bereich Sprachwissenschaft.
- Carling, Gerd (2005): Proto-Tocharian, Common Tocharian, and Tocharian – On the Value of Linguistic Connections in a Reconstructed Language. In: Jones-Bley / Karlene, Huld / Martin E. / Volpe, Angela Della / Dexter, Marian Robbins (eds.): *Proceedings of the Sixteenth Annual UCLA Indo-European*

- Conference. Journal of Indo-European Studies*. Monograph Series 50, Washington (D.C.): Institute for the Study of Man, 47–70.
- Carling, Gerd / Pinault, Georges-Jean (2023): *Dictionary and Thesaurus of Tocharian A*. Wiesbaden: Harrassowitz Verlag.
- Chen, Sanping (1998): Sino-Tokharico-Altaica – Two Linguistic Notes. *Central Asiatic Journal* 42(1), 24–43.
- Cheung, Johnny / Aydemir, Hakan (2015): Turco-Afghanica: On East Iranian **amarnā* and Turkic *alma*, *alimla*, *almīla* ‘apple’. Пелевин, Михаил Сергеевич (Отв.ред.): *На пастьбище Мысли Благой: сборник статей к юбилею И. М. Стеблин-Каменского*. Санкт Петербург: Контраст, 73–94.
- Clauson, Sir Gerard (1972): *An Etymological Dictionary of Pre-Thirteenth-Century Turkish*. Oxford: Clarendon Press.
- Dybo, Anna V. (2003): Turco-Tocharica and Turco-Sacica Renewed. In: Sárközi, Alice / Rákos, Attila (eds.): *Altaica Budapestinensia MMII. Proceedings of the 45th Permanent International Altaistic Conference. Budapest, Hungary, June 23–28, 2002*. Budapest: Research Group for Altaic Studies, Hungarian Academy of Sciences, 87–97.
- Dybo, Anna V. [Дыбо, Анна В.] (2007a): *Лингвистические контакты ранних тюрков. Лексический фонд пратюркский период*. Москва: Восточная литература РАН.
- Dybo, Anna V. [Дыбо, Анна В.] (2007b): Тюркско-тохарская контактная лексика. In: *Аспекты алтайского языкознания (Материалы Тенишевских чтений)*, 80–108.
- Dybo, Anna V. (2008): Mahmud Kaşgari'nin Sözlüğü'ndeki Eski Sinciang Dilleri'nden Alıntı Sözcükler Üzerine. I. *Uluslararası Kaşgarlı Mahmut Dil ve Edebiyat Sempozyumu. Bildiriler*. Lefkoşa, 73–82.
- Dybo, Anna V. (2014): Early Contacts of Turks and Problems of Proto-Turkic Reconstruction. *Tatarica* 2, 7–17.
- Erdal, Marcel (1991): *Old Turkic Word Formation: A Functional Approach to the Lexicon*, I–II. Wiesbaden: Harrassowitz Verlag.

- Erdal, Marcel (2004): *A Grammar of Old Turkic*. Handbook of Oriental Studies – Section Eight: Central Asia 3. Leiden – Boston: Brill.
- Gabain, Annemarie von / Winter, Werner (1958): *Türkische Turfantexte IX. Ein Hymnus an den Vater Mani auf „Tocharisch“ B mit alttürkischer Übersetzung*. Abhandlungen der Dt. Akademie der Wissenschaften zu Berlin Klasse Sprachen, Literatur ve Kunst Jg. 1956, Nr. 2. Berlin: Akademie Verlag.
- Gamkrelidze, Tamaz Valerianovich / Ivanov, Vyacheslav Vsevolodovich [Гамкрелидзе, Тамаз Валерианович / Иванов, Вячеслав Всеволодович] (1989): Первые индоевропейцы на арене истории. *Предки тохар в Древней Передней Азии Вестник Древней истории* 1, 14–39.
- Hamilton, James R. (1971): *Le conte bouddhique du bon et du mauvais prince en version ouïgoure - Manuscrits ouïgours de Touen-houang*. Paris: Centre National de la Recherche Scientifique.
- Hansen, Olaf (1940): Tocharisch-iranische Beziehungen: Ein Beitrag zur Lehnwortforschung Ostturkestans. *Zeitschrift der Deutschen Morgenländischen Gesellschaft* 94(2), 139–164.
- Henning, Walter B. (1938): Argi and the “Tokharians”. *Bulletin of the School of Oriental and African Studies* 9, 545–571.
- Henning, Walter B. (1949): The Name of the “Tokharian” Language. *Asia Major* 1(2), 158–162.
- Kasai, Yukio / Ogihara, Hirotohi (2017): *Die altuigurischen Fragmente mit Brāhmī-Elementen*. Berliner Turfantexte 38. Turnhout: Brepols Publisher.
- Kasai, Yukio / Yakup, Abdurishid / Durkin-Meisterernst, Desmond (Hrsg.) (2013): *Die Erforschung des Tocharischen und die alttürkische Maitrisimit. Symposium anlässlich des 100. Jahrestages der Entzifferung des Tocharischen. Berlin, 3. und 4. April 2008*. Silk Road Studies XVII. Turnhout: Brepols Publisher.

- Knüppel, Michael (2010): Gedanken zum zentral- und ostasiatischen „Spät-Manichäismus,” *Zeitschrift für Religions- und Geistesgeschichte* 62(4), 384–387.
- Knüppel, Michael (2011): Zur späten manichäisch-uygurischen Dichtung, In: Zekine Özertural / Jens Wilkens (Hrsg.): *Der östliche Manichäismus. Gattungs- und Werkgeschichte. Vorträge des Göttinger Symposiums vom 4./5. März 2010*, Berlin – Boston: De Gruyter, 89–100.
- Krause, Wolfgang (1951): Zur Frage nach dem nichtindogermanischen Substrat des Tocharischen. *Zeitschrift für vergleichende Sprachforschung* 69, 185–203.
- Laut, Jens P. (1986), *Der frühe türkische Buddhismus und seine literarische Denkmäler*. Wiesbaden: Harrassowitz Verlag.
- Laut, Jens P. (2003): Methoden und Möglichkeiten der Wiedergabe von indisch-buddhistischen Termini im Alttürkischen. In: Sven Bretfeld / Jens Wilkens (Hrsg.): *Indien und Zentralasien. Sprach- und Kulturkontakt. Vorträge des Göttinger Symposiums vom 7.-10. Mai 2001*. Veröffentlichungen der Societas Uralo-Altaica 61. Wiesbaden: Harrassowitz Verlag, 13–24.
- Laut, Jens P. (2022): Zu den ‘gelehrten Entlehnungen’ indischer Herkunft im Alttürkischen. In: Bayarma Khabtagaeva (ed.): *Historical Linguistics and Philology of Central Asia. Essays in Turkic and Mongolic Studies*. Languages of Asia 26. Leiden–Boston: Brill, 128–151.
- Lubotsky, Alexander / Starostin, Sergei (2003): Turkic and Chinese Loan Words in Tocharian. Brigitte L. M. Bauer / Georges-Jean Pinault (eds.): *Language in Time and Space. A Festschrift for Werner Winter on the Occasion of His 80th Birthday*. Berlin – New York: Mouton de Gruyter, 257–269.
- Lundysheva, Olga / Maue, Dieter (2021): An Old Uyghur Text Fragment Related to the Tocharian B “History of Kuchean Kings”. In: O. Corff (ed.): *Religion and State in the Altaic World. Proceedings of the 62nd Annual Meeting of the Permanent International Altaistic Conference (PIAC), Friedensau,*

- Germany, August 18–23, 2019*. Studien zur Sprache, Geschichte und Kultur der Türkvölker 32. Berlin: de Gruyter, 73–86.
- Maue, Dieter (2008): Three Languages on one Leaf: On IOL Toch 81 with Special Regard to the Turkic Part. *Bulletin of the School of Oriental and African Studies* 71, 59–73.
- Menges, Karl H. (1965): Zu einigen ural-altaisch-tocharischen Wortbeziehungen. *Orbis: Bulletin international de Documentation linguistique* 14(1), 126–137.
- Mironov, Nikolaj D. (1929): Kuchean Studies I. Indian Loan-Words in Kuchean. *Rocznik Orientalistyczny* 6(2), 89–169.
- Moerloose, Eddy (1980): Sanskrit Loan Words in Uighur. *Journal of Turkish Studies* 4, 61–78.
- Müller, Friedrich W. K. (1918): Toxrī and Kuišan (Küşän). *Sitzung der philosophisch-historischen Klasse der kaiserlichen Akademie der Wissenschaften* 1, 566–586.
- Naert, Pierre (1964): Contacts lexicaux entre le tokharien et ses voisins non-indoeuropéens. *Orbis* 13, 253–259.
- Peyrot, Michaël / Pinault, Georges-Jean / Wilkens, Jens (2019): Vernaculars of the Silk Road – A Tocharian B–Old Uyghur Bilingual. *Journal Asiatique* 307(1), 65–90.
- Peyrot, Michaël (2016): Language Contact in Central Asia: On the Etymology of Tocharian B *yolo* ‘bad.’ In: Bjarne Simmelkjaer Sandgaard Hansen / Benedicte Nielsen Whitehead / Thomas Olander / Birgit Anette Olsen (eds.): *Etymology and the European Lexicon. Proceedings of the 14th Fachtagung der Indogermanischen Gesellschaft, 17–22 September 2021, Copenhagen*. Wiesbaden: Dr. Ludwig Reichert Verlag, 327–335.
- Pinault, Georges-Jean (1997a): Terminologie de petit bétail en tokharien. *Studia Etymologica Cracoviensia* 2, 175–218.
- Pinault, Georges-Jean (1998): Tocharian Languages and pre-Buddhist Culture. In: Victor H. Mair (ed.): *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia*. Journal of Indo-European Studies, Monograph Series 26. Washington D.C.: The Institute for the Study of Man, 358–371.

- Pinault, Georges-Jean (2001): Tocharo-Turcica. In: Louis Bazin / Peter Zieme (eds.): *De Dunhuang à Istanbul. Hommage à James Russell Hamilton*. Silk Road Studies V. Turnhout: Brepols Publisher, 245–265.
- Pinault, Georges-Jean (2002): Tokh. B *kucaññe*, A *kuciṃ* et skr. *tokharika*. *Indo-Iranian Journal* 45, 311–345.
- Pinault, Georges-Jean (2004): Zum Tocharischen in der Turfanforschung. In: Desmond Durkin-Meisterernst / Simone-Christiane Raschmann / Marianne Yaldiz / Peter Zieme (eds.): *Turfan revisited – The first century of research into the arts and cultures of the Silk Road*. Monographien zur indischen Archäologie, Kunst und Philologie 17. Berlin: Dietrich Reimer, 256–263.
- Pinault, Georges-Jean (2007): Le Tokharien pratiqué par les Ouïgours. À propos d'un fragment en Tokharien A du Musée Guimet. In: Jean-Pierre de Drège / Avec Olivier Venture (eds.): *Études de Dunhuang et Turfan*. Genève, Librairie Droz. École Pratique des Hautes Études – Sciences historiques et philologiques II, Hautes études orientales 41 – Extrême Orient 6. Genève: Librairie Droz S. A., 327–366.
- Pinault, Georges-Jean (2015): The Tocharian Background of Old Turkic *yaŋı kün*. In: Elisabeth Ragagnin / Jens Wilkens (Hrsg.): *Kutadgu nom bitig: Festschrift für Jens Peter Laut zum 60. Geburtstag*. Veröffentlichungen der Societas Uralo-Altaica 87. Wiesbaden: Harrassowitz Verlag, 367–395.
- Pinault, Georges-Jean (2019): The Tocharian and Old Uyghur Testimony about the Etymology of Bodhisattva. In: Zekine Özertural / Gökhan Şilfeler (Hrsg.): *Unter dem Bodhi-Baum. Festschrift für Klaus Röhrborn anlässlich des 80. Geburtstags überreicht von Kollegen, Freunden und Schülern*. Göttingen: Vandenhoeck & Ruprecht Verlage, 271–291.
- Reinhart, Johannes (1994): Die tocharischen Entlehnungen im Altaischen und die Chronologie der tocharischen Lautgesetze. In: Bernfried Schlerath (Hrsg.): *Tocharisch. Akten der Fachtagung der Indogermanischen Gesellschaft. Berlin, September 1990*.

- Tocharian and Indo-European Studies Supplementary Series 4. Reykjavík: Málvísindastofnun Háskóla Íslands, 73–92.
- Róna-Tas, András (1974): Tocharische Elemente in den altaischen Sprachen? In: Georg Hazai / Peter Zieme (Hrsg.): *Sprache, Geschichte und Kultur der altaischen Völker. Protokollband der XII. Tagung der Permanent International Altaistic Conference 1969 in Berlin*. Schriften zur Geschichte und Kultur des alten Orients 5. Berlin: Akademie Verlag, 499–504.
- Schaefer, Christiane (2010): Multilingualism and Language Contact in Urban Centres along the Silk Road during the First Millennium. In: Paul J. J. Sinclair / Gullög Nordquist / Frands Herschend / Christian Iendahl (eds.): *The Urban Mind: Cultural and Environmental Dynamics*. Studies in Global Archaeology 15, 441–445.
- Schmidt, Klaus T. (2001): Zeitenwende an der Seidenstrasse. Zur Sprachgeschichte des Westtocharischen nach der Schlacht von To-Ho. In: Luc Deitz (ed.), *Tempus edax rerum. Le bicentenaire de la Bibliothèque Nationale de Luxembourg (1798-1998)*, Luxembourg: Bibliothèque nationale de Luxembourg, 151–162.
- Shōgaito, Masahiro (1991): On Uighur Elements in Buddhist Mongolian Texts. *Memoirs of the Research Department of the Toyo Bunko* 49, 27–49.
- Shōgaito, Masahiro 庄垣内正弘 (1978): Kodai uigurugo ni okeru indo raigen shakuyō goi no dōnyū keiro ni tsuite (‘古代ウイグル語’におけるインド来源借用語彙の導入経路について) [On the Routes of the Loan Words of Indic Origin in the Old Uigur Language]. *Ajia, Afurika gengo bunka kenkyū* (アジア・アフリカ言語文化研究) [Journal of Asian and African Studies] 15, 79–110.
- Tamai, Tatsushi (2005): Paläographische Untersuchung und C 14-Prüfung. Digitalisierung der chinesischen, tibetischen, syrischen und Sanskrit-Texte der Berliner Turfansammlung. 02. Juni 2005. http://www.bbaw.de/bbaw/Forschung/Forschungsprojekte/turfan_forschung/bilder/Tamai.pdf

- Tekin, Şinasi (1994): Eski Türkçede Toharca Unsurlar. *Tarih ve Toplum* 132, 5–12.
- Tokyürek, Hacer (2014): Eski Uyğurca Sayı Sisteminde *takı* ve *artokı* Sözcükleri Üzerine. *Türkbilig* 28, 1–12.
- Tuğuşeva, Lilia Yu. (2002): Türkler ve Toharlar Arasındaki Münasebetler. Hasan Celâl Güzel / Kemal Çiçek / Salim Koca (ed.): *Türkler*, Cilt 2, Ankara: Yeni Türkiye Yayınları, 152–156.
- Ünal, Orçun (2022): Is the Tocharian Mule an “Iranian Horse” or a “Turkic Donkey”? Further examples for Proto-Turkic */t₂/ [ts]. *International Journal of Old Uyghur Studies*, 4(2), 126–154.
- Wang, Penglin (1993): On the Etymology of English silk: A Case Study of IE and Altaic Contact. *Central Asiatic Journal* 37(3–4), 225–248.
- Wang, Penglin (1995a): Tokharian Words in Altaic Regnal Titles. *Central Asiatic Journal* 39(2), 165–203.
- Wang, Penglin (1995b): Indo-European Loanwords in Altaic. *Sino-Platonic Papers* 65, 1–28.
- Wang, Penglin (1998): A Linguistic Approach to Inner Asian Ethnonyms. In: Victor H. Mair (ed.): *The Bronze Age and Early Iron Age Peoples of Eastern Central Asia*, Vol. 1. Journal of Indo-European Studies, Monograph Series 26. Washington (D.C.): Institute for the Study of Man, 483–507.
- Wilkens, Jens (2013): Der “Neutag” und die Maitrisimit. Probleme der zentralasiatischen Religionsgeschichte. In: Kasai, Yukio / Yakup, Abdurishid / Durkin-Meisterernst, Desmond (Hrsg.): *Die Erforschung des Tocharischen und die alttürkische Maitrisimit. Symposium anlässlich des 100. Jahrestages der Entzifferung des Tocharischen, Berlin, 3.-4. April 2008*. Silk Road Studies XVII. Turnhout: Brepols Publisher, (375–401).
- Wilkens, Jens (2016a): Buddhism in the West Uyghur Kingdom and Beyond. In: C. Meinert (ed.): *Transfer of Buddhism Across Central Asian Networks (7th to 13th Centuries)*. Dynamics in the History of Religions 8. Leiden–Boston: Brill, 191–249.
- Wilkens, Jens (2016b): *Buddhistische Erzählungen aus dem alten Zentralasien: Edition der altuigurischen Daśakarmapathāva-*

- dānamālā*. Berliner Turfantexte XXXVII, Teile 1-3. Turnhout: Brepols Publisher.
- Wilkens, Jens (2021a): *Uigurisches Wörterbuch. Sprachmaterial der vorislamischen türkischen Texte aus Zentralasien*. Bd. 3: Fremdelemente, Teil 1: *ec – bodis(a)v(a)tv*. Stuttgart: Franz Steiner Verlag.
- Wilkens, Jens (2021b): *Handwörterbuch des Altuigurischen (Altuigurisch – Deutsch – Türkisch) – Eski Uygurcanın El Sözlüğü (Eski Uygurca – Almanca – Türkçe)*. Göttingen: Universitätsverlag.
- Wilkens, Jens (2022): Practice and Rituals in Uyghur Buddhist Texts: A Preliminary Appraisal. In: Yukio Kasai / Henrik H. Sørensen (eds.): *Buddhism in Central Asia II: Practices and Rituals, Visual and Material Transfer*. Dynamics in the History of Religions 12. Leiden – Boston: Brill, 430–464.
- Wilkens, Jens (2023a): *Uigurisches Wörterbuch. Sprachmaterial der vorislamischen türkischen Texte aus Zentralasien*. Bd. 3: Fremdelemente, Teil 2: *bodivan – cigzin*. Stuttgart: Franz Steiner Verlag.
- Wilkens, Jens (2023b): Einige Beobachtungen zur Übersetzungstechnik der altuigurischen Maitrisimit. *Journal of Old Turkic Studies* 7(2), 553–571.
- Winter, Werner (1984): *Studia Tocharica. Selected Writings – Ausgewählte Beiträge*. Poznań: Wydawnictwo Naukowe Uniwersytetu im. Adama Mickiewicza w Poznaniu.
- Winter, Werner (1963): Tocharians and Turks. In: Denis Sinor (ed.): *Aspects of Altaic Civilization: Proceedings of the Fifth Meeting of the Permanent International Altaistic Conference Held at Indiana University, June 4-9, 1962*. Indiana University Publications, Uralic and Altaic Series 23. Bloomington: Bloomsbury Publishing, 239–251.
- Zieme, Peter (2012): Some Notes on Old Uigur Translations of Buddhist Commentaries. In: *Annual Report of the International Research Institute for Advanced Buddhology (ARIRIAB) at Soka University for the Academic Year 2011*, Vol. XV, 147–160.

1.1. Annotated Bibliography

Aalto, Pentti (1964): *Word-pairs in Tokharian and other languages.*

Pentti Aalto examines and compares binary combinations of two synonyms or antonyms, binominal and biverbal phrases (i.e., *bicoordinatives*), which he calls “word-pairs” in Tocharian and other genetically and typologically diverse languages;¹ e.g., binominal ToChA *ñom klyu* ~ ToChB *ñem kälywe* ‘name-fame’, i.e. ‘fame, renown’ (= OUyg. *at kü* ‘name-fame’ = Middle Mongolic *nere aldar* ‘name-fame’) etc.; biverbal ToChA *ärtanträ pālanträ* ‘(they) eulogize-praise’ (cf. Old Turkic/Uyghur *ög- küle-* ~ *ög- alka-* ‘eulogize-praise’).

Aalto draws attention to the fact that some scholars (Sapir, Schulze, and Krause) tried to explain the origin of the bicoordinatives in Tocharian from different foreign languages: (1) Alto notes that E. Sapir considered them to be loan translations of Tibetan Buddhist technical terms (cf. Tib. *yid-smon* ‘soul-wish+wish’, *t’ugs-dgoṅs* ‘heart-wish+will’). Aalto, however, rejects this view by saying that “Buddhism was spread among the Tokharians earlier than in Tibet, and that in Tokharian there are almost no Tibetan words.” (2) According to Aalto, W. Schulze and later W. Krause compared some bicoordinatives in Tocharian (e.g., ToChA *akmal* ‘face’ < *ak+mal* ‘eye+nose’) with Finno-Ugric

¹ In my master’s thesis, which I wrote in German, I introduced the term “*Bi-Koordinativ*” (besides “*Tri-Koordinativ*” and “*Multi-Koordinativ*”) for such binominal and biverbal structures in Turkic languages when I classified them (Aydemir 2007). These structures had not been classified until then, and the widely used terms or concepts such as *hendiadyoin*, *word pairs*, *binom*, *biverb*, etc. seemed inadequate to characterize or describe the peculiarities of this phenomenon in Turkic in every detail. The previous terms for this phenomenon were limited to only one part of a large system. Since these structures in Tocharian are typologically the same as those in Turkic languages, I prefer to use the term “*bicoordinative*” for these types of constructions here, adapting it to English as well (cf. “*co-ordinative*,” Bloomfield 1933: 195).

parallels (e.g., Ostyak *ńot-sēm*, Vogul *ńol-sam* ‘nose+eye’ = ‘face’, etc.). While Schulze made cautious statements on these similarities, Krause wonders whether the assumption of a possible Finno-Ugric substratum in Tocharian could be historically justified.

Aalto, however, also draws attention to the fact that bicoordinatives similar to Tocharian ones have existed not only in the Finno-Ugric languages but also in Turkic and Mongolic. He quotes some Tocharian bicoordinatives that have close parallels in Old Turkic and Mongolic: TochA *waste pārmañk* ‘refuge+hope’ = OUyg. *umug inag* ‘hope+refuge’, etc., TochB *saim-wāste* ‘support and refuge; protector’ (often an epithet of the Buddha) = Mo. *itegel abural* ‘protection+refuge’, Toch. *añumāski weyeñ* ‘wonderful + astonishing’ = Old Turkic *tañlančig muñadinčig* ‘wonderful + astonishing’, etc. He further remarks that “some of the instances quoted above can also be literary translation loans in imitation of Tokharian expressions.” He also states that “like the Tokharian pairs, the Turkic and Mongolian expressions usually inflect only the second component. Moreover, the pairs in these languages are often composed of words corresponding exactly to those used in Tokharian, ...”

He states as a conclusion that “the Tokharian binomials are clearly to be classed among the non-Indo-European elements of this language. The obvious similarity between them and the compound expressions of the Altaic languages perhaps suggests that they are originally due to the influence of a Proto-Turkic sub- or adstratum.”

Dybo, Anna (2003): *Turco-Tocharica and Turco-Sacica Renewed.*

In this paper, Dybo discusses some Turkic-Tocharian and Turkic-Saka (Khotanese) lexical equivalents. In the Tocharian-Turkic section, she examines seven words that she thinks have transferred from Tocharian to Turkic: (1) DLT *oxāk* ‘juice of split apricots used as a beverage,’ cf. TochA/B *oko* ‘fruit.’² (2) DLT

² OTu. *oxāk* does not appear to be a direct borrowing from Tocharian. Because of the *-x-* and final *-k*, it seems more likely to be a Tocharian word borrowed

čanač ‘an effeminate and cowardly person,’ cf. TochA *śām* ‘wife,’³ TochB *śana* reflect PTo. **čānā* from (late) PIE *g^weneh_a-*. (3) DLT *čömerük kiši* ‘a man with watery eyes,’ cf. TochB, TochA *tsem* ‘blue.’ (4) OUyg. *leşp* ~ *leşip* ‘phlegm, one of three humors,’ DLT *lēš* ‘id.,’ cf. TochB *leşp* ‘phlegm’ [one of three humors]; ‘froth, foam.’ (5) OUyg., DLT *karši* ‘palace,’ cf. TochB *kerccī* ‘id.’⁴ (6) DLT *ermeli* ‘a swift horse,’ cf. TochB *ramer* ‘quickly, suddenly.’ (7) OUyg. *madar* ‘monster,’ cf. TochB *mātar* (~ *mādar*) ‘sea-monster,’ TochA *mātār* ‘id.’⁵

As for the Turkic-Tocharian section, she examines six words that she thinks have transferred from Turkic to Tocharian: (1) TochB *iprer* (~ *ipprer* ~ *eprer*) ‘sky, air, atmosphere,’ TochA *eprer* ‘id.,’ cf. KB *ewren* ‘the firmament,’ Trk. *evren* ‘universe, cosmos, world.’⁶ (2) TochB *kakwār* ‘a kind of food,’ cf. **kagurma*, **kagurdak* from OTu. *kagur-* ‘to fry.’⁷ (3) TochB *kwašo* ‘village,’ cf. CTu. *koš* ‘camp, camping; house, dwelling; hut, etc.’⁸ (4) TochB *pale* (~ *pala*) ‘the designation of some household official or servant, ... a guard?’ Cf. **bāla* ‘child, young’ (DLT *bala* ‘a young bird, nestling’).⁹ (5)

through Sogdian mediation (cf. Sogdian adjective suffix *-k*). This question, however, requires a separate study.

³ Cf. **śna-ši* ‘femininus’ (Poucha 1955: 331).

⁴ Cf. *karši* ← TochB *ker(c)iyi* ← Ir. *gardiya-* Reinhart 1994: 77.

⁵ Cf. also Róna-Tas 1974: 503, No. 18 and Reinhart 1994: 76.

⁶ This word has been discussed below as well; see Dybo 2007.

⁷ This word has been discussed below as well; see Dybo 2007.

⁸ Cf. also Róna-Tas 1974: 503, No. 25 and Reinhart 1994: 78-79.

⁹ This match seems very plausible. The semantic relationship between the Old Russian *čaga* ‘female slave’ ← Turkic *čaga* ‘child’ given by Dybo above can also be supported by other Turkish words: Trk. *uşak* ‘child; servant // çocuk; hizmetçi’ (from *uşak* ‘child’), and Trk. dial. *hizan* ‘servant // hizmetçi, uşak’ (from Trk. *kizan* ‘boy; offspring // erkek çocuk; çoluk çocuk’). The DLT *bala* ‘a helper for a man in his work’ in metaphoric use (especially used in regard to agricultural work) seems, however, to have escaped Dybo’s attention. The words *bala* ‘young (bird, animal)’ and *bala* ‘a helper for a man in his work’ in DLT are actually one and the same word. In my opinion, the Turkic word *bala* is of Sanskrit origin, i.e., Skr. *bāla* ‘child; baby animal’ → PTu. **bāla* ‘child; baby animal’ > Trk. *bala* (Tkm. *bāla*) ‘child; baby animal;’ the different origin explanation for Turkic *bāla* in EDAL (see Starostin / Dybo / Mudrak 2003: 325–326) is unacceptable. The Turkic examples above show that the semantic extension in the direction of ‘child’ → ‘servant’ is a usual semantic

TochB *peške* ‘clarified butter, ghee’ (a medical ingredient).¹⁰ According to Dybo, the source of borrowing in TochB may be a derivative in *-ke* in Turkic.¹¹ (6) TochB *miye* ‘an oil-producing fruit?’; cf. Uzbek *miya*, Tatar dial., Kazakh, Nogay, Kyrgyz *mīya* ‘liquorice, orach.’¹²

Dybo, Anna V. (2007b): *Тюркско-тохарская контактная лексика* [Turkic-Tocharian contact lexicon].

In this study, Dybo examines and evaluates presumed Tocharian-Turkic lexical correspondences in relation to loanwords believed to be of Indo-European origin in Proto-Turkic or Old Turkic. Some of these presumed correspondences are from the list of A. Róna-Tas.¹³

The first word she examines is Turkic *altun*. She discusses various possible connections and etymologies, including potential links to Tocharian words for ‘iron’ (*eñcuwo* ~ *iñcuwo*), Ossetian (*āndon*), and Khwarezmian (*hnčw*) words related to ‘steel.’ Additionally, there is a suggestion of a connection to PIE **ond-* meaning ‘stone,’ with comparisons to Sanskrit and Celtic words for ‘stone’ or ‘rock.’ However, contrary to some opinions, this word is surely unrelated to TochB *eñcuwo* ~ *iñcuwo* ‘iron.’ Namely, CTu.

development in Turkic. Taking into account the above, we can assume that the meaning ‘female servant’ of the Old Russian *čaga* of Turkic origin has already emerged in Turkic (i.e., Turkic *čaga* ‘child; *servant’ → Old Russian *čaga* ‘female slave’). Based on all this, Dybo’s matching doesn’t seem impossible at all. Thus, the TochB *pale* (~ *pala*) and its meaning ‘servant’ may be of (West Old?) Turkic origin and go back to a Turkic **bāla* / **bala* ‘servant’ (← Turkic **bāla* ‘child; baby animal’). The meaning of the DLT *bala* ‘a helper for a man in his work’ also partially supports this assumption. The chronology of the borrowing from Turkic into Tocharian is unclear at this time.

¹⁰ Cf. also Menges 1965, no. (5) above.

¹¹ A derivative in *-ke* is not impossible in Turkic, but such a form is not attested in Turkic. Despite phonetic difficulties, there seems to be a connection between Persian *māskā* ‘fresh butter’ and TochB *peške*. According to Adams, it is probably a borrowing from some Middle Iranian source (Adams 2013: 430).

¹² A connection between TochB *miye* and Uzbek *miya*, Tatar dial., Kazakh, Nogay, Kyrgyz *mīya* ‘liquorice, orach’ cited by Dybo, however, seems to be very likely.

¹³ Róna-Tas 1974.

altun seems to go back to PTu. **āltun* < **haltun* < **haltuŋ* ~ **haltoŋ* < PTu. **hal* ‘red(dish)’ + PTu. **tuŋ* ~ **toŋ* ‘a type of precious metal’ (← LHan *doŋ* 銅 ‘bronze; copper,’ see above).

Another word she associates with TochB *yasa* ‘gold’ and TochA *wäs* is OUyg. *yéz* [jez] ‘copper’ (cf. SSTu. *yes* ‘id.’). The OUyg. and SSTu. words are, however, not mentioned by Dybo. Instead, she associates the Tocharian words in question with a PTuD **jEř* ‘copper,’ which, according to her, goes back to PAlt. **ziře* ‘metal; anvil.’ She thinks that the “semantic relationship between Tocharian and Turkic words is good, but the Altaic etymology of the Turkic word is also quite acceptable.” She obviously assumes a development of PTuD **jEř* > OTu. (i.e., OUyg.) *yéz* ‘copper’, SSTu. *yes* ‘id.’ Contrary to Dybo, I think this Altaic etymology is unacceptable, because in Turkic, the phonological shift was not zetacistic, i.e., not PTu. **/ř/* > */z/* or PTu. **/ř/* > */z/* (i.e., **r₂* > *z*) as pro-Altaicists propose, but certainly rhotacistic, i.e., PTu. **/z/* > */r/* (and **/d/* [ð] > */z/* > */r/*).¹⁴ I may be wrong, but as I have proposed in an earlier study, it seems very likely that the Turkic word may be of Tocharian origin: OUyg. *yéz* [jez] ‘copper’ (cf. SSTu. *yes* ‘id.’) < late PTu. **yéz* ~ **yēs* < PTu. **yēs* < **yēsě* / **yēsǎ* (or **yēse* / **yēsa*) ← TochB *yasa* ‘gold’, TochA *wäs* (< PTo. **wiāsā*).¹⁵

Other presumed correspondences from the list of Róna-Tas she evaluates are as follows:

¹⁴ Among many others, the case of (DS *sem-* > **sem-(i)z* / **semi-(i)z* >) *semiz* ‘fat’ > **semir* (Chuv. *samār*, DS *semir*) also proves this well. For this and proof of the *z* > *r* phonological shift, see Aydemir 2005. Among others, the final *-r* in the Chuvash *pir* ‘fabric; linen; cloth’ is also clear evidence of this phonological shift because this word is a loanword in Turkic and Mongolic languages (i.e., Chuv. *pir* < POg./PBulg. **bēr* < PTu. **bēz* ← **bez*/**bēs*). Vovin is definitely wrong when he thinks that Chuv. *pir* goes back to a PBulg. **bör* and CTu. **böz* (PTu. **böz* > PBulg. **bör* > Chuv. *pir*, Vovin 2018: 266). Because, as Róna-Tas writes, the “Chuvash *-i-* can go back to a former *e*, but an original *-ö-* (short or long) would never become an *-i-* in Chuvash. Thus the Chuvash word is reflecting an original form **bez...*” (Róna-Tas 1975: 160).

¹⁵ Aydemir 2023: 8-9; for PTo. **wiāsā*, see Adams 2013: 525. Probably TochB *yasa* or a variant of it is contained in TochB *yasna* ‘treasure chamber, treasury,’ whose final *-na* is not clear (see Adams 2013: 526 a); For possible explanation of *-na*, see Aydemir 2023: 9, note 19.

PTuD¹⁶ **ok* ‘arrow’ vs. TochB *akwatse* ‘sharp;’ PTuD **Koλ* ‘hut, shack, camp’ vs. TochB *koškiye* ‘hut;’ PTuD **tām* ‘roof, wall’ vs. TochB *stām* ‘tree’, TochA *štām* ‘id.;’ PTuD **tōr* ‘the honored place in a yurt, furthest from the entrance’ vs. TochB *twere* ‘door;’ PTuD **tōrt* ‘four’ vs. TochB *stwer* ‘four’, A *stwar*; PTuD **tūmen* ‘ten thousand; very many’ vs. TochB *t_(u)māne* ‘ten thousand, a myriad’, TochA *tmām*, TochB *t_umāne*; PTuD **yigirmi* ‘twenty’ vs. B *ikaṃ* ‘twenty’, A *wiki* ‘id.;’ PTuD **bilči-* > **biši-* ‘to stir, to whip (milk, butter)’ vs. TochB *peške* ‘clarified butter, ghee;’ PTuD *(*h*)*okuř* ‘bull, ox’ vs. TochB *okso* ‘cow, ox’, TochA *ops-*; PTuD **kīl* ‘sable’ vs. Toch. **kis* < PIE **kek-*, **kek-* ‘marten, ferret;’ PTuD **kār* ‘goose’ vs. Toch. **kās-* < PIE **ghans-* ‘goose.’

Dybo also examines several Proto-Turkic plant names that, according to her, currently lack satisfactory Altaic etymologies and yet can be reasonably interpreted as borrowings from some Indo-European but non-Iranian, possibly Kentum group language. Thus, according to her, the following four Turkic plant names having regular Chuvash parallels are possible loanwords from Tocharian, although no parallels to these Turkic plant names have been found in Tochar texts:

(1) OUyg. *alimla*, DLT *almila*, *alma*; According to Dybo, the hypothetical source of the Turkic word could have looked, for example, like **amil-la* ‘apple’ (> *alimla* with metathesis) – a reflex and meaning that are theoretically possible for Tocharian. Dybo only mentions the Chuvash literary form *ulma* ‘apple,’ but there are also dialect forms in Chuvash, *āmla*, and *omla* ‘id.’, which Dybo does not mention.¹⁷

(2) PTuD **eykel* ‘acorn, cone,’ Chuv. *yəkəl(ə)*, dial. *ikəl* ‘acorn’, Tatar *ekele*, dial. *ekelē*, *ekeli* ‘acorn, pine cone’; Bashkir dial. *ekele* (southern dialect group) the same. Dybo remarks that the word is narrowly distributed in the Volga region, and the Chuvash, Tatar, and Bashkir forms are unlikely to be borrowed from each other. She

¹⁶ Reconstructions indicated by PTuD are by Dybo.

¹⁷ For the Chuvash dialect forms and another possible Tocharian origin of the Turkic *alma*, *alimla*, and *almila*, see also Cheung / Aydemir 2015.

compares the Turkic forms with various IE forms but does not give a specific Tocharian form.

(3) PTuD **e/ilme* ‘elm, aspen, maple,’ Chuv. *jəlmə* ‘elm, maple,’ Kmk. *əlmə* ‘maple,’ etc. vs. IE **elm-* ‘maple.’ She compares the Turkic forms with IE **elm-* but does not give a specific Tocharian form.

(4) PTuD **abs-ak* ‘aspen,’ Chuv. *äväs* ~ dial. *us*; Hak. *os* ‘poplar,’ Shor *aspak*, etc. She compares the Turkic forms with PIE **ap[u]s-* / **asp-* ‘aspen, poplar’ but does not give a specific Tocharian form and notes that there are no convincing Indo-Iranian parallels to the PIE root

Dybo remarks that “the last three Turkic words have limited distribution, which may result from the limited distribution of corresponding plants within present-day Turkic territory. However, it cannot be attributed to borrowing from Germanic or Slavic languages, as the chronological and territorial contexts for such contacts are impossible for Proto-Turkic. These words, at the same time, lack solid Altaic etymologies. Phonetically, they could potentially be traced back to the common Tocharian reflexes of corresponding Indo-European roots (the split of Common Tocharian into languages A and B is estimated glottochronologically to the 20th century BCE). Nevertheless, such reflexes are not attested in Tocharian texts.”

According to Dybo, the following Chuvash word having no Altaic etymology could, in principle, be traced back to an undiscovered (proto-)Tocharian source as well as to a genuinely attested Iranian source: Chuv. *ătăr* (~ *xătăr*) ‘mouse-like animal; river otter; an aquatic animal, the size of a quarter; mole.’¹⁸ Dybo reconstructs a PTu. **utir* (ř?) ‘otter’ (sic) for the Chuvash form, because she thinks that the assumption of borrowing from a Tocharian or Iranian source “is not justified culturally or historically. Otters are distributed practically throughout all of northern Eurasia, except for desert regions.” However, as she herself also notes, there

¹⁸ See Fedotov 1996: 93; Ashmarin 1929: 78-79.

is no particular reason to derive it from an Altaic etymology. The Chuv. *ătār*, in my opinion, seems to be relatively old in the Chuvash lexicon and, thus, go to a form **utur* or **utir*, which may go back to **utr-* or a similar form in a source language of IE origin (i.e., *ătār* < Chuv. **utur* / **utir* ← SL **utr-*?). Could this source language be Tocharian? It is possible, but not certain. Accepting this working hypothesis would lead to questions about the place and time of the borrowing, which would be challenging, if not impossible, to answer at present. I consider the possible etymological connection of the Chuvash word with CTu. *it* ‘dog’ to be excluded.

Another Chuvash isolate associated with TochB *peret* ‘ax,’ TochA *porat*, is Chuv. *port(ь)* ‘axe.’ In this regard, she remarks that if we had any evidence of the Proto-Turkic nature of the Chuvash word, it could be recognized as either an Eastern Iranian (Proto-Saka) or Tocharian borrowing; but since there is no such evidence, she considers it an Alanism or Permian form in Volga-Bulgarian (cf. Zyryan *purt* ‘knife,’ Udmurt *purt* ‘id.’).

Dybo also discusses possible Tocharian borrowings from Turkic, as proposed by A. Lubotsky and S. A. Starostin.¹⁹ Some of those were also suggested by A. Róna-Tas as Tocharian loanwords in Turkic, unlike Lubotsky and Starostin.²⁰ These are as follows: (1) TochA *klyu* vs. OTu. *kü*; (2) TochA *kom*, and TochB *kaum* vs. OTu. *kün*; (3) TochA *tor*, TochB *taur* vs. OTu. *tōz*; (4) TochA *kanak*, TochB *kenek* vs. OTu. *kōñlek*; (5) TochB *t_(u)māne*, TochB *t_umāne*, TochA *tmām*, OTu. *tümen*; (6) TochB *ām* vs. OTu. *amul*, *amīl*; (7) TochB *olya* vs. OTu. *ulug*; (8) TochB *pārseri* vs. PTuD **bürče* (Tat. *börče*, Kmk. *bürče*); (9) TochB *yase* ‘shame’ vs. OTu. *yās* ‘damage, harm, destruction, loss;’ (10) TochB *kärk-* ‘rob, steal’ vs. OTu. *karak* ‘brigandage.’

Dybo suggests another layer of Tocharisms in Turkic languages, which lack Turkic etymology and reflexes in contemporary Turkic languages. These are as follows: (1) DLT *oxāk* ‘juice of split apricots

¹⁹ Lubotsky / Starostin 2003.

²⁰ Róna-Tas 1974.

used as a beverage,' cf. TochA/B *oko* 'fruit,'²¹ (2) DLT *čanač* 'an effeminate and cowardly person,' cf. TochA *sām* 'wife,'²² TochB *šana* reflect PTo. **čānā* from (late) PIE *g^weneh_a*; (3) DLT *čömerük kiši* 'a man with watery eyes,' cf. TochB, TochA *tsem* 'blue.'; (4) OUyg. *bère, bere* 'a measure of length,' TochB *prere* 'arrow,' TochA *pär* (cf. *pär-ra-krase* 'distance of an arrow-shot'); (5) OUyg. *lešp ~ lešip* 'phlegm, one of three humors,' DLT *lēš* 'id.,' cf. TochB *lešp* 'phlegm' (one of three humors); 'froth, foam;' (6) OUyg., DLT *karši* 'palace,' cf. TochB *kerccī* 'id.;' (7) DLT *ermeli* 'a swift horse,' cf. TochB *ramer* 'quickly, suddenly;' (8) OUyg. *madar* 'monster,' cf. TochB *mātar* (~ *mādar*) 'sea-monster', TochA *mātār* 'id.'²³ (9) DLT *nāg* 'crocodile; cyclic sign, cf. TochA *nāg, nāk* 'Naga, a serpent-demon,' TochB *nāk, nāke, nāge* 'dragon' (in the calendrical cycle of years); (10) OUyg. *banit* 'molasses, bagasse, syrup,' cf. TochB *panit ~ pañit* 'molasses;' (11) OUyg. *saparir ~ sparir* 'crystallized quartz,' cf. TochB *spharir* 'crystal;' (12) OUyg. *ankabuš / angabuš* (Dybo: *änkäbüs*) 'Hingu (*Ferula asafoetida*),' cf. TochB *änkwaš(ṭ)* 'asa fetida (*Ferula foetida* Regel);²⁴ (13) OUyg. (TTVIII) *širyu* 'star,' cf. TochB *šcirye* 'id.;' (14) OUyg. *p(a)ryan* 'cell,' cf. TochA/B *paryām* 'circuit, space between cells in a monastery;' (15) OUyg. *ačak(a)ram* 'snake, bright tiger python,' TochB *acakarm* '?';²⁵ (16) OUyg. *künčit* 'sesame,' cf. TochA/B *kuñcit* 'id.;' (17) OTu. *yawlak, yablāk* 'bad, evil,' cf. TochB *yolo*

²¹ As I have already suggested above, OTu. *oxāk* cannot be a direct borrowing from Tocharian. Because of the -x- and final -k, it seems more likely to be a Tocharian word borrowed through Sogdian mediation (cf. Sogdian adjective suffix -'k); see also Dybo 2003 above.

²² Cf. **šna-ši* 'femininus' (Poucha 1955: 331).

²³ Cf. also Róna-Tas 1974: 503, No. 18 and Reinhart 1994: 76.

²⁴ Dybo suggests that the Uyghur word is probably a graphical borrowing with the substitution of *w* with *p* (Dybo 2007b: [17]). Röhrborn, however, remarks that although the similarity to Tocharian B *änkwaš* has been noted multiple times, it cannot be assumed to be a direct borrowing (Röhrborn 2015: 172).

²⁵ Adams does not give the meaning of the word (Adams 2013: 7). Dybo suggests that the Uyghur word may be a loanword from Tocharian, or it may also be from Sogdian. However, based on its phonetic shape, the Sogdian word cannot be a candidate for being the source of the Old Uyghur word (Dybo 2007b: [17]).

‘bad, evil; ugly;’²⁶ (18) OUyg. *nirvan* ‘nirvana,’ cf. TochA/B *nervām* ‘id.’ (cf. Sog. *nyrβ’n* [nirvān]); (19) OUyg. *aviš* ‘the name of the eighth great hell, the deepest hell in Buddhism,’ cf. TochA *Aviš* ‘Avīci, name of a hell’, TochB *Apiš* ‘id.’; (20) OUyg. *čantal*²⁷ ‘executioner, outcast,’ cf. TochA *caṇḍāl* ‘Caṇḍāla, executioner,’ TochB *caṇḍāl(e)* ‘outcast (and therefore the performer of undesirable social roles such as executioner);’ (21) OUyg. *čintan* (Dybo: *čyntan*) ‘sandalwood (tree),’ cf. TochB *cantām* ~ *candām* ‘sandalwood (tree);’²⁸ (22) OUyg. *asanke* (Dybo: *asanki*) ‘Asaṃkhyeya world period, an incalculable long period; countless,’ cf. TochA *asaṃkhe*; (23) OUyg. *važinpat* ~ *važanpat* (Dybo: *vzampat*) ‘ordination;’ cf. TochA *wasāmpāt* ‘ordination,’ TochB *wasāmpāt* ‘id.’;²⁹ (24) OUyg. *š(a)rmire* ‘novice (monk),’ cf. TochB *šarmire* ‘id.’; (25) OUyg. *baranas* ‘Benares,’ cf. TochA *bārāṇas* ‘id.’.

In the final section of her research, Dybo investigates potential Turkic loanwords in Tocharian B that, in her view, lack satisfactory Indo-European etymologies:

(1) TochB *iprer* (~ *ipprer* ~ *eprer*) ‘sky, air, atmosphere,’ TochA *eprer* ‘id.’;³⁰ cf. KB *ewren* ‘the firmanent,’ DLT *ewren* ‘a dome-shaped oven,’ Trk. *ewren* ‘universe, cosmos, world.’³¹ According to her, the Turkic forms go back to **ebren* ‘dome, sky, heavens’, which

²⁶ On the Proto-Oguric (Bactrian Hun) origin of TochB *yolo*, see Aydemir 2023: 12-14.

²⁷ According to Wilkens, OUyg. *čantal* is a Sogdian loanword (i.e., *čantal* ← Sog. *cnt’(‘)r*, see Wilkens 2021: 222), but because of the final *-r* of the Sogdian form, it does not seem possible to have been borrowed from Sogdian.

²⁸ Dybo’s matching is not very accurate because the vowels on the first syllable do not match. The form *čintan* seems to be of Chinese origin, as Wilkens thought; i.e., LMC *tšian thian* 旃檀 (Wilkens 2007: 361); cf. Skr. *candana* > OUyg. *čandana*. OUyg. *čandan* with Brahmi letters goes, however, back to TochB *candām* (~ *cantām*).

²⁹ OUyg. *važinpat* ~ *važanpat* seem two separate borrowings from Tocharian; i.e., OUyg. *važinpat* < **vazinpat* < **vasinpat* ← TochA *wasāmpāt*, and *važanpat* < **vazanpat* < **vasanpat* ← TochB *wasāmpāt*. A /z/ ~ /ž/ alternation in Old Uyghur is not a rare case.

³⁰ For the etymology of the Tocharian words, see Adams 2013: 70.

³¹ Dybo also discussed this word in her 2003 study; see Dybo 2003.

she derives from the transitive verb PTu. **ebür-* ‘to rotate;’ and the Tocharian forms may have been borrowed from Turkic with a suffix replacement. Dybo’s matching seems problematic because there is no clear reason for the Turkic *-r* to change to *-n* in Tocharian A/B or for suffix replacement. As for the Turkic *ewren*, it lacks a satisfactory etymology. It seems, however, very likely that it goes back to PTu. **ewreŋ* (> OTu. *ewren*). The word *ewren* first appears in the late Old Turkic period, in the 11th century, during the Karakhanid Turkic period (10th–12th c.), and an alternation of *-ŋ* ~ *-n* in word-final position as a dialectal feature in Karakhanid is not a rare case (cf., DLT *yataŋ* ~ *yatan* ‘a wooden bow,’ *tapçaŋ* ~ *tapčan* ‘a three-legged stool for picking grapes,’ *kalkaŋ* ~ *kalkan* ‘shield,’ etc.). Thus, it appears highly probable that there was also an **ewreŋ* along with the *ewren* (i.e., **ewreŋ* ~ *ewren*), which seems to have been derived from an intransitive verb **ewre-* ‘to turn round, rotate, etc.’ (i.e., OTu. *ewren* ‘the firmanent’ < **ewreŋ* < **ewre-ŋ* < **ewre-* < **eb+rA-* ‘intr. to turn, rotate’ < **eb* ‘circle, circular; ring’³² > **eb+ü-* ‘intr. to turn, rotate’ > **eb+ü-r-*³³ ‘tr. to turn, rotate’ > OTu. *ewir-* ‘id.’).³⁴

(2) Another matching of Dybo is Tocharian *tiri* ‘manner, rule, habit,’ Tocharian B *teri, tiri* ‘way, means, manner.’ Dybo matches it with CTu. *tür* ‘type, sort, kind, manner, etc.’ (cf. OTu. *törlüg* ‘sort, kind’), which she derives from PAlt. **turi* ‘face,’ PMo. **duri* (cf. WMo. *düri* ‘shape, form, outline; appearance, view, etc.’). Dybo reconstructs therefore a PTu. **dür* for CTu. *tür*, and thinks that the Tocharian form with the final vowel may be a borrowing of the Turkic third-person possessive form. Adams therefore thinks that Tocharian B *teri* ~ *teri* is suspiciously similar to Old Turkic *törü, törö*

³² As a semantic analogy, cf. Tofalar Turkic *ög* ‘house; circle; ring (around the moon)’ (Rassadin 2005: 76). Thus, the meaning of ‘house’ in Turkic may have emerged as follows; ‘circular (circle) / round-shaped dwelling (circular housing)’ → ‘house.’

³³ As a morphological analogy, cf. OTu. *këjür-* ‘to widen, broaden, enlarge’ < *këj+ü-r-*; cf. Sevortyan 1974: 499.

³⁴ Cf. ESTJa: 499-500.

‘law, custom, customary law.’³⁵ Dybo’s suggestions regarding PTu. **dür*, however, encounter difficulties. Namely, (a) the Chuvash forms *těr* ‘different, diverse, varied, all kinds; any; kind, sort, type.’ and *těrlě* ‘id.’³⁶ as well as other Turkic forms with *t-* clearly refer to an initial PTu. **t-*; (b) It is also not very likely that TochA/B *tiri* is a borrowing of the Turkic third-person possessive form (i.e., +*i*). Namely, the final vowel of *tiri* may also be the stem-final vowel, which was apocoped in the Proto-Turkic period (i.e., before 6 c. CE).³⁷ Based on all this, CTu. *tür* ‘type, sort, kind, manner, etc.’ may theoretically go back to PTu. **türi* (~ ? **töri*). If Tocharian *tiri* is indeed related to PTu. **türi*, then we have to assume a (CTu. *tür* <) PTu. **türi* > **tiri*³⁸ → TochA/B **tiri* backward assimilation in Proto-Turkic. Because if PTu. **türi* had been borrowed into Tocharian with **ü*, we would have seen **turi* in Tocharian with sound substitution, since the two Tocharian languages had /u/.³⁹ As for TochB *teri*, if it is indeed related to PTu. **türi*, in principle, we can suppose as a working hypothesis that this is a case of multiple borrowing, going back to a possible **töri* (~ **türi*; cf. OTu. *törlüg* ‘sort, kind’) form in Proto-Turkic, and borrowed as *teri* in Tocharian B through sound substitution (PTu. */*ö*/ → ? *PTö. /*e*/; i.e., PTu. **töri* → ? PTo. **teri*). Thus, there are many uncertainty factors. In

³⁵ Adams 2013: 324.

³⁶ For the Chuvash forms, see Fedotov 1996: 219 and Ashmarin 1941: 87–88.

³⁷ As I mentioned in a previous work (Aydemir 2023: 10), this phenomenon affected a significant part of the Proto-Turkic lexicon, if not all of it; e.g., OTu. *bod* ‘height, stature (of a man); clan, tribe’ < PTu. **bodu* (cf. OTu. *bodun* ‘tribes; people’ < **bodu+n*); CTu. *sor-* ~ *sora-* ‘ask’ < PTu. **sora-*; CTu. *sag-* ‘to milk (an animal)’ < PTu. **saga-* = Mo. *saga-* ‘id.’; OTu. *tön* ‘garment, clothing’ < PTu. **tonă* ~ **tona* ← Khot. *thona* / *thonă* (~ *thauna*) ‘cloth’ (for the Khotanese forms, see Bailey 1979: 149b). Here arises the question whether the loss of stem-final vowels in Proto-Turkic is an influence of Tocharian A interference (or vice versa?) since the same phenomenon also took place in Tocharian A. Namely, according to Adams, “Early too was the loss of all final vowels” in Tocharian A; cf. TochA *kaṃ* (TB *kene*) ‘melody, tune,’ TochA *oṅkalām* (TochB *oṅkolmo*) ‘elephant’ (Adams 1988: 27).

³⁸ Cf. Karaim Turkic (Galician dialect) *tirli* ‘varied.’

³⁹ For the common inventory of simple vowels in the two Tocharian languages, see Krause / Slocum 2023.

addition, as mentioned above, Tocharian words have also been associated with the OTu. *törö, törü* ‘law, custom, customary law’ (cf. TochA *tiri* ‘manner, rule, habit), which makes the issue even more complicated.

(3) Dybo matches TochB *kakwār* ‘a kind of food’ with OTu. *kagur-* ‘to fry.’ However, this matching encounters many difficulties, especially from a phonetic and morphological point of view.⁴⁰ The etymology of *kakwār* is unknown.⁴¹

(4) Another potential Turkic loanword in Tocharian, according to Dybo, is TochB *kwašo* ‘village;’ cf. CTu. *koš* ‘camp, camping; house, dwelling; hut, etc.’⁴² This word was already discussed above in relation to Dybo 2014.

(5) Another matching of Dybo is TochB *pale* (~ *pala*) “the designation of some household official or servant, ... a guard?” Cf. DLT *bala* ‘a young bird, nestling.’ According to Dybo, the Tocharian form could be either borrowed from Turkic **bāla* ‘child, offspring’ or from Sanskrit *bāla-* ‘child.’ This word was already discussed above in this section.

Other presumed correspondences from the list of Róna-Tas she evaluates at the end of this study are as follows: a) PTuD **biłči-* > **biši-* ‘to stir, to whip (milk, butter)’ vs. TochB *peške* ‘clarified butter, ghee;’ b) TochB *miye* ‘an oil-producing fruit?’, cf. Uzbek *miya*, Tatar dial., Kazakh, Nogay, Kyrgyz *miya* ‘liquorice, orach;’ c) TochB *pārseri* vs. PTuD **bürče* (Tat. *börče*, Kmk. *bürče*, Chuv. *p^bwrza*); d) TochB *yase* ‘shame’ vs. OTu. *yās* ‘damage, harm, destruction, loss;’ e) TochB *kärk-* ‘rob, steal’ vs. OTu. *karak* ‘brigandage.’

As a result, Dybo makes the following chronological determination: “So, convincing evidence of direct contacts between the Turks and the Tocharians in the pre-Turkic era cannot be found. Contacts during the ancient Turkic era (7th–11th centuries AD), on the contrary, are fairly well represented in both directions, both in

⁴⁰ This word has been discussed above as well; see Dybo 2003.

⁴¹ Adams 2013: 143.

⁴² Cf. also Róna-Tas 1974: 503, No. 25 and Reinhart 1994: 78-79.

everyday life and within the literary language; they are clearly associated with the Uyghur-Karakhanid tradition and the territory of Xinjiang.”

Dybo, Anna V. (2014): *Early contacts of Turks and problems of Proto-Turkic reconstruction.*

In this article, Dybo examines loanwords in the Turkic languages, as well as borrowings from Turkic languages falling within the domains of the Proto-Turkic and Common Turkic periods. She examines three Tocharian-Turkic correspondences, two of which were proposed by A. Róna-Tas as Tocharian loanwords from Proto-Turkic.⁴³ Among them, according to her, two are Old Turkic loanwords in Tocharian B. Namely, she thinks that TochB *kwašo* ‘country’ (sic; cf. *kwaš-* ‘village’) “could be a loan from” OTu. **koš* ‘cottage,’⁴⁴ which, according to her, goes back to PTuD **koλ* (i.e. TochB *kwašo* ← OTu. **koš* < PTuD **koλ*).⁴⁵ However, this suggestion, in my opinion, leaves some phonological problems on the Tocharian side unexplained. In this connection, the question is, if this is so, as Dybo suggests, what is the final *-o* on the Tocharian side, or why OTu. *k-* is substituted as a labiovelar *kw-* by Tocharian B; or we can also ask why the OTu. **koš* was not borrowed as **koš* in TochB but as *kwašo*. Thus, the relationship between the two words is not clear. However, because of the final *-o* (i.e., open syllable) on the Tocharian side, as a working hypothesis, it is also worth considering the possibility that the OTu. **koš* may have entered Tocharian B as *kwašo* via Khotanese or another Iranian language mediation. On the other hand, as a working hypothesis, it is also worth considering the possibility that TochB *koškiye* ‘hut’ of uncertain etymology is possibly a direct borrowing from Turkic, and goes back to a Turkic form with a diminutive suffix (i.e., **koš+kīya*

⁴³ Róna-Tas 1974: 503, No. 4, 25.

⁴⁴ This word has been attested first in Middle Turkic (see Räsänen 1969: 283).

⁴⁵ Cf. Dybo 2007b: [3]. Róna-Tas thinks the other way around. According to him, the Turkic *koš* was borrowed from Tocharian (Róna-Tas 1974: 503, No. 25; cf. Reinhart 1994: 78, 85); cf. Adams 2013: 199.

‘small cottage’).⁴⁶ Namely, according to Adams, *koškiye* is “probably not a loanword from Iranian.”⁴⁷

Another word that she thinks was borrowed from Old Turkic is TochB *peške* ‘clarified butter, ghee.’ This word has already been discussed above.⁴⁸

Menges, Karl H. (1965): *Domaine tokharien. Zu einigen ural-altajisch-toxarischen Wortbeziehungen.*

In a study, Pierre Naert (1964) discussed some Tocharian words and suggested their etymologies from Uralic, Turkic, and Chinese. Menges critically examines Naert’s etymological suggestions. Menges considers four major foreign language influences on Tocharian: (1) Uralic, (2) Altaic, (3) Chinese, and (4) several pre- and non-Indo-European layers. He thinks that Altaic elements entered Tocharian in the Tarim Basin and in the last periods of Tocharian. He examines the following pairings of Naert: (1) TochA *kärtkäl* ‘stretch of water, pond, well, pool, spring’ TochB *kärkkälle* ~ *kärkkälle* ‘swamp, marsh, mud.’ Menges rightly refused Naert’s matching of *-käl(le)* with the OTu. *köl* ‘pool, lake.’ (2) TochB *kerccī* ‘palace’ = OTu. *karši* ‘id.’. Menges accepted the matching but rightly refused that the OTu. word cannot be a direct borrowing from Tocharian due to palatal-velar opposition. (3) TochA *kumpäc* ‘drum’ = MTu., MUyg., Tar. *dumbaq* ‘drum; hill.’ According to Menges, the TochA word is “just a distant echo of the Turkic form.” Thus, he did not refuse this match clearly. But I think the two words nothing to do with each other. (4) TochA *pāsīm* ‘treasure’ = MUyg. *xāzīnā* ‘id.’. Menges rightly refused the matching and accepted Bailey’s opinion, according to whom TochA word is of Khotanese origin; see *pārgyiña*, *pāziña* ‘id.’. (5) TochB *peške* ‘clarified butter, ghee’ (a medical ingredient) = MUyg. *māskā* ~ *māškā* ‘fresh butter.’ Menges accepted this match. According to him, however, the MUyg. words can be a borrowed either from Persian (i.e., *māskā*) or from TochB

⁴⁶ For the Old Turkic diminutive suffix *+kIñA*, see Erdal 1991: 47-56.

⁴⁷ Adams 2013: 220.

⁴⁸ See above Dybo 2003, No. 5; Menges 1965.

of Kucha. However, in my opinion, because TochB *p-* = MUyg. *m-*, it does not seem to be possible that the MUyg. words are of TochB origin. The MUyg. words may be of Iranian origin: *māskā* from Persian, *māškā* possibly via Khotanese (i.e., MUyg. *māškā* ← Khot. **māsikā*? ← Per. *māskā*). (6) TochB *māla* (i.e., TochB *mālo* ‘a kind of intoxicating drink’) = Tatar *mällä* ‘vodka, Spirituosen.’ According to Naert, TochB and Tatar words are borrowings from a third source. Menges rightly thought that the Tatar word is of Persian origin and its meaning ‘vodka’ is secondary.

Naert matched TochA *wās* and TochB *yasa* with their Samoyedic equivalences. He did not mention OTu. or MTu. *yāz* ‘copper’. But Menges rightly considers the following words meaning ‘copper’ in modern Turkic languages ending in *-s* and *-z* to be of TochB origin: MTu. *yāz*, Baraba *yis*, South Siberian Turkic *yās*, etc.

Müller, Friedrich W. K. (1918): *Toxri and Kūšan (Kūšan)*.

In this study, Müller examines three ethnonyms concerning Tocharians, i.e., *Yuezhi*, *Twqry*, and *Kūsen / Kūšen*. In Chapter I, Müller criticizes some researchers who have previously read or reconstructed the name *Yuezhi* (月氏) as *Yüe-ti* (J. Klaproth), *Get-ti* (Schlegel), *Ngüt-tšī / Ngüt-šī* (O. Franke), and *Yüe-tšī* (J. Marquart), or *Gur-ši / Kur-ši* (A. v. Staël-Holstein).⁴⁹ In Chapter II, he makes some explanations about various ethnonyms (*Toxri*, *Toxri*, *Ārsi*, *Tukharak*, *Tu-huo-lo*, etc.) in historical sources that are thought to be related to Tocharians. In chapter III, he examines the name *Kūsen* (Müller: *Kūšan*, *Kūšan*) in some Old Uyghur colophons and concludes that it denotes the *Kushan* (Müller: *Kušana*), the territory of Gandhāra, and the Kabul Valley, i.e., the name of the Kushan Empire. But today we know that *Kūsen* is actually the name of the city of Kucha, the center of the TochB language and culture, and is the Old Uyghur form of Sogdian *kws'n*.

⁴⁹ On the reconstruction of the name *Yuezhi*, see Aydemir 2019.

Naert, Pierre (1964): *Contacts lexicaux entre le tokharien et ses voisins non-indoeuropéens.*

Pierre Naert examines some Tocharian words, for which he suggested etymologies from Uralic, Turkic and Chinese. For matchings of the Turkic origin of Naert, see Menges 1965 above.

Pinault, Georges-Jean (1998), *Tocharian languages and pre-Buddhist culture.*

In this study, Pinault examines, among others, “the mutual influence between Tocharian and Altaic” in order to reconstruct the pre-Buddhist culture of Tocharians. His research is based on the vocabulary of some basic concepts in Tocharian and Turkic, as well as some formulas. He tries, with the help of the etymology of some Tocharian-Turkic words, to catch a glimpse of the pre-Buddhist world of the Tocharians, where those words were coined.

In the first group, he compares the following Tocharian-Turkic words under the subtitle “religion and aristocratic ideology:” (1) ToChA *koṃñkät* ‘sun-god,’ ToChB *kaṃñäkte* ‘sun-god,’ cf. OUYg. *kün täñri* ‘sun; sun-god’; (2) ToChA *maññkät*, ToChB *meññäkte* ‘moon-god,’ cf. OUYg. *ay teñri* ‘moon; moon-god;’ (3) ToChA *käṃ-ñäkte*, *tkäṃ-ñkät* ‘earth-god,’ cf. *yēr teñri* ‘earth and heaven; earth goddess.’ These are the names of pre-Buddhist deities in Tocharian culture that are common with Turkic-speaking peoples.⁵⁰ The chronology of these structural and semantic similarities between Tocharian and Turkic that Pinault draws attention to is unclear for now. However, as a working hypothesis, I suppose that they may belong to the first period of Tocharian-Turkic language contacts (i.e., before the 3rd century BCE),⁵¹ since language contact situations in the second period (i.e., after the 3rd century BE) were not so intense and long-standing and would not enable this kind of

⁵⁰ Dybo finds the idea that the structural similarity of the names of the moon and sun deities in Turkic and Tocharian is due to contact unconvincing (Dybo 2007b: 10, note [7]). See also Winter 1963 above.

⁵¹ For the periodization of Tocharian-Turkic language contacts, see Aydemir 2023: 6-16.

similarity to emerge. If we take into account that these beliefs, as well as semantic and structural parallels, belong to the pre-Buddhist period of the Tocharians, then the above chronology seems right to me for now. However, in the light of new data, knowledge, and results, this chronological proposal may have to be refined or revised in the future.

Pinault also compares the binominal phrase TochA *ñom klyu* ~ TochB *ñem kälywe* ‘name-fame’, i.e., ‘fame, renown,’ with the OUyg. *at kü* ‘name-fame’ (cf. Middle Mongolic *nere aldar* ‘name-fame’), and thinks that this phrase “has been imitated by the Ancient Turks, by the Uighurs.” Based on Louis Basin’s suggestion, Pinault thinks that the *kü* in Turkic is probably a borrowing from Tocharian.⁵²

It seems highly likely that, for chronological reasons, the *kü* may be a Tocharian loanword in late Proto-Turkic since it can already be attested in the Orkhon Turkic inscriptions (i.e., 8th century *kü* ‘rumor; fame, reputation,’ 11th century DLT *kū* ‘famous’).⁵³ However, for phonological reasons, it seems almost certain that *kū* was borrowed into Proto-Turkic from Tocharian A. The final *-ū* in Turkic seems to be a sound substitution (i.e., nativization) for *-lyu* in Proto-Tocharian, i.e., in TochA (i.e., late PTu. **-ū* ← TochA *-lyu*). Thus, Pinault’s proposal, that is, “diphthongal *-yu* > *-ū*,” seems to be very likely.

⁵² Contrary to Pinault, Dybo thinks that *kü* is not of Tocharian origin, but Turkic. Dybo derives it from PTu. **kü(b)* ‘glory // слава’, which – according to her – goes back to PAlt. **k̆jube* (Dybo 2007b: [11]; cf. Aydemir 2023: 9). However, Dybo’s opinion is not convincing at all because her Proto-Turkic reconstruction **k̆jube* is not based on existing forms but only on assumed ones. Specifically, the only existing word that Dybo associates with OTu. *kü* to support her opinion is Shor *küg* (< OTu. *küg* ‘song, melody’). However, it seems that Dybo’s attention escaped the fact that Shor *küg* is of Chinese origin (see Clauson 1972: 709).

⁵³ See Clauson 1972: 686. The vowel of the *kü* in the Orkhon Turkic inscriptions may also be long (i.e., **kū*). Since the Orkhon runic alphabet does not indicate vowel lengths, we write this word in the inscriptions (8th c.) with a short vowel (i.e., *kü*).

According to Pinault, Tocharian terminology concerning the four cardinal points and the seasons of the year is similar to the system of the Turkic peoples but very different from the Indian system of six seasons.

Pinault also briefly discusses the titlature *yabgu*, a political-military term of Turkic origin. According to the state of the research in 1998, in Tocharian, only the *yāppäk*, a personal name, was known as the equivalent of the *Yabgu*. Adams still seems to regard it as a variant of *yabgu*.⁵⁴ But since then, the forms of TochB *yapko* ~ *yāpko* have also been detected in Tocharian, and Pinault has shown that *yāppäk* has nothing to do with *Yabgu*. According to him, it is of Turkic origin and related to the OTu. *yapīg*, ‘construction; covering,’ which is also used as a Buddhist technical term in the sense of Skr. *skandha* in OUyg.⁵⁵ As can be seen in the summary of Pinault 2007 below, he is right because *yapīg* is also attested as a personal name in Old Uygur in the form of *Yapīg* and *Yapik*.⁵⁶ The Tocharian personal name *Yāppäk*, thus, seems to go back to this Old Uygur personal name.

As for the ultimate origin of *Yabgu*, the language from which it ultimately comes is clearly Turkic and is a derivation of the Turkic verb *yap-* ‘to cover something, someone, or the retreat;’ i.e., *yap-gu* > **yapgu* > *yabgu* *‘guard, guardsman’ → *Yabgu* (as a titlature and political-military term).⁵⁷ TochB *yapko* ~ *yāpko* – if not a borrowing from Bactrian *ιαβγο* – may have been borrowed from the West Old Turkic in the second half of the 6th century (i.e., *yapko* ~ *yāpko* ← WOTu. *yabgu*; cf. *Yapgu* in Gandhari as a personal name from the 3rd century).⁵⁸

The chronology of the structural and semantic similarities between Tocharian and Turkic that Pinault draws attention to above

⁵⁴ Adams 2013: 529.

⁵⁵ See Pinault 2007 below.

⁵⁶ For *Yapīg*, see Wilkens 2021: 865; for *Yapik*, see Oda 2015: 206; see also Rásonyi / Baski 2007: 332.

⁵⁷ For more information, see Aydemir 2021: 502–5014.

⁵⁸ For *Yapgu* in Gandhari, see Burrow 1940: 16₈₂, 77₃₈₂.

is unclear for now. However, as a working theory, I suppose that they must belong to the first period of Tocharian-Turkic language contacts (i.e., before the 3rd century BCE), since language contact situations in the second period (i.e., after the 3rd century BE) were not so intense and long-standing and would not enable this kind of similarity to emerge.

Pinault, Georges-Jean (2001): *Tocharo-Turcica*.

In this study, Pinault draws attention to the importance of comparing Maitrisimit texts written in Old Uyghur and Tokharian A, and shows with examples the contribution of the Old Uyghur version to the understanding of the Tocharian A text. In this connection, he notes that speakers of the Tocharian language (A and B) had long contact with Turkic-speaking populations, especially the Uighurs. However, he thinks it “is difficult to say when these contacts began, but they probably preceded the settlement of the Uighurs in the Turfan region, at least at the beginning of the 9th century CE and probably already at the end of the previous century.”

Pinault, Georges-Jean (2007): *Pinault, Le Tokharien pratiqué par les Ouïgours. À propos d'un fragment en Tokharien A du Musée Guimet.*

In this study, Pinault examines a fragment in Tocharian from the Guimet Museum (inventory number BG 63319). The reproduced text of Buddhist content is intended to recall the merits of the Turkic sponsors, who have performed and are performing a series of good deeds (among others, almsgiving to the religious people). The genre and rhetoric of the text are similar to those of Uyghur Turkic texts known from the Kocho region from the 9th to the 11th centuries, the first phase of Uyghur Buddhism.

In the text, Pinault identifies several words (see below) as proper names (or elements of proper names) of Turkic origin. According to him, the strong presence of proper names of the Uyghur Turkic origin suggests that this text dates from the same period as the copying of the major Buddhist texts “around the 9th century at the

latest at the beginning of the 10th century.” These names belonged to donors who had a Buddhist text copied or ordered the preparation of a special votive text on the occasion of a pious foundation, such as donating a statue, painting, or any other object to a monastery. According to Pinault, Tocharian A texts with Turkic proper names come mostly from the Yanqi (Shorchuq region) and a few from the Turfan (Sengim region). He therefore considers it likely that the fragment of unknown origin was found in this region and not in the Kucha region in the west of the Tocharian language area. Pinault examines the proper names in three groups based on their origins:

(1) Proper names of Turkic origin:

(a) *Ārslānām* (includes the singular oblique ending *-ām*); cf. OUyg. *Arslan* pn., OTu. *arslan* ‘lion.’ Pinault notes that this name appears in a TochB manuscript (B 289b5) in the form *Arslam* as well.⁵⁹

(b) *Ātāk*; cf. OUyg. *Adig* pn. < OTu. *adig* ‘bear.’

(c) *Kāttum*; cf. OTu. *kātun*, *kātūn*, *katun* ‘queen, lady; women; wife;’ cf. also TochA *hkhātum* in the A 399-404 (cf. OTu. *xātun* ‘id.’).

(d) *Kutlukām*; cf. OTu. *kutlug*. The singular oblique marker *-ām* is used in TochA to characterize proper names and appellations of feminine gender. That is, this name designates a woman. If it were a man called *Kutlug*, the form of singular oblique expected in TochA would be *kutluk* or better *kutluk-ām*, cf. *Ārslānām* above.⁶⁰

(e) *Cor*; cf. OTu. *čor*, the title of the head of a small confederation of tribes and a part of a proper name or element of a compound proper name, cf. OUyg. *Čor Bars*, etc. It is also known from other Tocharian texts, in both Tocharian A and B.

⁵⁹ The TochA *Ārslān-* and TochB *Arslam* go back to the OTu. *Arslan*, a male name (i.e., *Aslan* < *Arslan* < MTu. *arsalan* ‘lion’ < **arsalaŋ* < **arsal aŋ* < OTu. *arsal* ‘auburn, bay’ + *aŋ* *‘wild animal’ > OTu. *aŋ* ~ *eŋ* ‘wild game,’ cf., WMo. *aŋ* ‘beast;’ cf. also Balci 2012: 279).

⁶⁰ Pinault 2007: 349.

(f) *Ināṃ*; cf. OTu. *inanč* ‘reliance, trust; reliable, trustworthy,’ which was used as the title of ‘confidential minister’ or the like in Old Turkic.⁶¹

(g) *Yāppāk* is the singular nominative of a title or proper masculine nominative, borrowed from Turkic. Pinault thinks that this form in TochA has nothing to do with the title *Yabgu* in Turkic and assumes that the TochA form may be related to the OTu. *yapig* ‘construction; covering,’ which is also used as a Buddhist technical term in the sense of Skr. *skandha* in OUyg. Pinault is right because *yapig* is also attested as a personal name in OUyg. in the form of *Yapig* or *Yapik*.⁶² Thus, *Yāppāk* seems to go back to this personal name.

(h) *Tāppāk* is a singular nominative of a masculine proper name, borrowed from Turkic. Pinault assumes that it may be related to the OTu. *tapig* ‘service, adoration, respectful or religious service,’ although this word is not attested as a personal name in Turkic.

(2) Proper names of Chinese origin:

Four of the Chinese-origin names in the fragment are female names (*ñāṃtsim*, *thāñyāṃtsi*, *śāpām*, *myosāk*), and one is male (*tinkem*).⁶³ According to Pinault, the fact that several of the Turks (i.e., Uighur notables) mentioned in the fragment, especially the women, have names of Chinese origin may indicate that they maintained contact with the Chinese court. However, he adds that it would be risky to hypothesize too much on this since Chinese personal names can also be found in other Tocharian texts.

(3) Proper names of unknown origin:

Pinault examines two names in this group: *Lpik* and *Sākko*. He does not comment much about these names, thinking that there is not enough information on them, but he states that the possibility that

⁶¹ Clauson 1972: 187.

⁶² For the first one, see Wilkens 2021: 865; for the latter one, see Oda 2015: 206; see also Rásonyi / Baski 2007: 332.

⁶³ For more explanation about these names of Chinese origin, see Pinault 2007: 351-354.

they are of Turkic or Chinese origin cannot be excluded. He adds that these names may also come from another source other than these two.

(a) As for the *Lpik*, Pinault matches this word with the OTu. *alp* ‘brave; hero; resistant, etc.’ He notes that OTu. *alp* can also be found in a TochB manuscript (B 289b2) in the form of *ālp*. According to Pinault, in the case of *Lpik*, a Turkic origin seems possible since this name is preceded and probably followed by other Turkic names. But the suffix *-i* or *-ik* is difficult to explain, unless we admit Middle Iranian mediation or the influence of Tocharian names with the suffix TochA *-ik* (TochB *-ike*), a suffix whose Iranian origin is probable (cf., Sog. *-īk*, Bakt. *-iyo* < **(i)ya-ka-*). He attributes the phenomenon of apheresis of the initial vowel *a-* to Sogdian mediation. We can summarize Pinault’s assumption as follows: TochA *Lpik* ← ? Sog. **lpīk* < **ālpīk* < Sog. **alp-īk* ← ? OTu. *alp*. But of course, this is just one of the assumptions Pinault sees as likely.

(b) As for *Sākkō*, a masculine proper name, its origin remains enigmatic, although it is in a line with names that are all of Turkic origin.

Pinault, Georges-Jean (2015): *The Tocharian background of Old Turkic yañi kūn.*⁶⁴

In this study, Pinault examines the Tocharian background of OUyg. *yañi kūn*, literally ‘new day,’ which basically means ‘feast, festivity; festival, ceremony,’ but also ‘wonder, spectacle.’⁶⁵ As Wilkens⁶⁶ and also Pinault state, *yañi kūn* is most likely a translation of Sogdian *nwy myδ*, literally ‘new day,’ the feast celebrating the New Year. Based on Wilkens’s (2013) examination, Pinault also states that the TochA *opšāly* ‘occasion, festivity, ceremony’ is consistently translated with OUyg. *yañi kūn* in Maitrisimit, which

⁶⁴ For a detailed analysis of *yañi kūn* in Old Uyghur Buddhism, see Wilkens 2013.

⁶⁵ See Wilkens 2013: 395-396.

⁶⁶ Wilkens 2013: 380, 396.

obviously does not mean ‘new day,’ and is not related to any special day of the ritual calendar, nor to any Buddhist feast.” Again based on Wilkens, he further states that in *Maitrisimit*, the visual aspect of the festivity was especially pregnant, so that the term took the secondary meaning of ‘wonder’ or ‘show’ (German ‘Wunder, Spektakel’), precisely in connection with *körünč*. At this point, however, according to Pinault, a problem arises because it is questionable whether the meaning of ‘feast, festivity’ was already present at the time of the composition of the *MSN*. This is all the more necessary since the available Tocharian glossaries provide contradictory accounts.⁶⁷

Pinault, Georges-Jean (2019): *The Tocharian and Old Uyghur testimony about the etymology of bodhisattva.*

In this comparative paper, Pinault examines the etymology of the term *Bodhisattva* and some other basic terms of Buddhist vocabulary from a wider perspective (i.e., Sanskrit, Tocharian, Sogdian, and Prakrit), including Old Uyghur as well. He also examines how those Buddhist terms in question were interpreted by the clergy for the purpose of transmitting the Buddhist doctrine in their respective languages. He thinks that some of those Buddhist formulas and phrases have been translated into Old Uyghur as well, which became part of the repertoire of the Uyghur literates who composed Buddhist texts. Some of the Tocharian Buddhist terms examined in the paper are compared to their equivalents in parallel texts in Old Uyghur.

One of these terms and formulas is the Tocharian *puttiśparam* ‘status of Buddha, Buddhahood’, which, as Pinault states, is constantly translated by the very frequent phrase Old Uyghur *burhan kuti* ‘Buddhahood.’ Another term is Tocharian *puttiśparam kalpā-* ‘to reach the Buddhahood’ matching regularly by Old Uyghur *burhan kutin bul-* ‘id.’ in *Maitrisimit*. Tocharian *puttiśparam ritā-* ‘to search for the Buddhahood’ is matched by Old Uyghur *burhan kutin tilä-*. Another

⁶⁷ *MSN* = *Maitreyasamiti-Nāṭaka* in Tocharian A.

phrase is TochA *puttišparnac ākāl* ‘the wish for Buddhahood’ matching by OUyg. *burhan kutıña kūsüş* ‘id.’, which uses the dative case in Old Uyghur to translate the Tocharian allative, and translates TochA *ākāl* ‘wish’ by OUyg. *kūsüş* ‘id.’ Pinault also gives the context in which these expressions occur.

Reinhart, Johannes (1994)

Reinhart examines 36 words that A. Róna-Tas (1974) thinks were transferred from Tocharian to Proto-Turkic from the perspective of Tocharology. He summarizes the sound correspondence rules in a list based on the words suggested by Róna-Tas. According to Reinhart, in the case of some words suggested by Róna-Tas, a direct borrowing from an Iranian language is either as likely or more likely than a borrowing from Tocharian. Among the words of Iranian origin mediated by Tocharian he proposed, Trk. *altun* ‘gold’ can surely be excluded because it has a Turkic etymology.⁶⁸ According to Reinhart, intra-Tocharian phonetic laws make it considerably more difficult or impossible to accept a considerable number of the matches proposed by Róna-Tas, not to mention that a number of words in Róna-Tas’ list have connections in other Altaic languages, which also make it difficult to evaluate Tocharisms in Turkic (e.g., no. 10 Turkic *kele-* ‘sprechen,’ Mo. *kele-* ‘id.’; no. 27 Turkic *tām* ‘wall,’ Mo. *tama* ‘id.’, Korean *tam* ‘id.’; etc.).

Schaefer, Christiane (2010): *Multilingualism and Language Contact in Urban Centres along the Silk Road during the First Millennium.*

⁶⁸ According to Reinhart, the Turkic *altun* is of Tocharian origin, see Trk. *altun* ← Tocharian **añcu / eñcuwo* ‘iron’ ← Chwaresmian *hnčw* (Reinhart 1994: 77; cf. Róna-Tas 1974: 502, and Dybo 2007b: 81). However, this runs into serious phonological and semantic difficulties; cf., PTu. **altañ* < PTu./PMo. **altan* (cf. WMo. *altan* ‘gold’, Tun. *altan* ‘gold’) ← PTu. **āltun* < PTu. **haltun* < PTu. **haltuŋ* ~ **haltoŋ* < PTu. **hal* ‘red(dish)’ + PTu. **tuŋ* ~ **toŋ* ‘a type of precious metal’ (← LHan *doŋ* 銅 ‘bronze, copper’); for the initial *h-*, cf. Monguor *ħaldan* ~ *ħardam* ‘golden’, Shirongol *haldan* ‘id.’, see Aydemir 2021: 17, note 5.

The ecolinguistic study of Christiane Schaefer takes into account the status, internal variation, domains of usage, concurrent codes, and language contacts of Tocharians. According to Schaefer, in Tocharian, there are traces of the impact of concurrent codes, not only in the lexicon but also on the structural, morphological, and morphosyntactic levels. She thinks that Tocharian as a written code was abandoned sometime between the 8th and 10th centuries AD and became extinct as a spoken code at an unknown point in time. Schaefer assumes Tocharian languages (A/B) to have been prestigious codes among speakers of Old Turkic (i.e., Old Uyghur) since it is generally known that there are Uyghur interlinear glosses and Turkic names in colophons of Tocharian Buddhist documents, which indicate Uyghur and Turkic speakers both used Tocharian manuscripts and commissioned and donated them.

As for the Turkic influence on Tocharian, Schaefer draws attention to several things. (1) She argues that because of the prestige of the Tocharian (A/B) language – at least until around 900 AD – no lexical borrowings from Old Turkic into Tocharian can be expected, and hardly any have been found. (2) She draws attention, however, to the point that a closer look at Tocharian morphology and syntax reveals Turkic influence. Namely, Tocharian (A/B) “developed a two-storey case system, with so-called secondary cases inflecting agglutinatively, that is to say, in a manner typical for Turkic but not for Indo-European languages.” Schaefer considers this feature a Turkic substratum influence that could have taken place so that the “speakers of the dominated code, Old Turkic, inserted (“imposed”) a Turkic pattern into the dominating code, Tocharian, ...”. (3) Based on this feature, she supposes further that another striking feature of Tocharian, namely the extensive use of converb constructions as a clause-combining strategy (just like in Turkic), might be explained through this “imposition” and the possible substratum influence of Turkic. (4) She further remarks that the functioning as converbs of “absolutives” (ablatives of verbal abstracts) and “middle participles” (ending in Tocharian A *-mām*, Tocharian B *-(e)mane*) as a “deviating” feature in both the Tocharian varieties is typical for converbs in the Asian

languages and especially in the Turkic. (5) Based on these features, Schaefer assumes that the bilingual Old Turkic speakers transferred certain syntactic patterns and features of their own language through substrate influence into the prestigious one, Tocharian, using Tocharian morphology. She rightly states that such an “impact on the morphosyntactic system of a code presupposes sufficiently intense and close language contact, and it implies a considerable number of bi- or multilingual speakers. When and where that happened is unclear.” According to Schaefer, Tocharian seems to have ceased being a written code for the domain of religion, administration, and economy in the Tarim Basin by the end of the 8th or 9th century AD, since only a few Tocharian manuscripts are attested after the 9th century. She doesn’t think, however, that “Tocharian also disappeared as a spoken code; it may well have been used as a means of oral communication far beyond that time.”

Wilkens, Jens (2013): *Der “Neutag” und die Maitrisimit. Probleme der zentralasiatischen Religionsgeschichte.*⁶⁹

Wilkens examines the expression *yaŋi kün*, literally ‘new day,’ which is frequently used in Manichaean and Buddhist literature of the early Old Uyghur (10th c.) and even in the late Old Uyghur (13th/14th c.) from the Mongolian epoch. He examines all relevant text passages in Old Uyghur Buddhist literature, especially in *Maitrisimit nom bitig* and *Daśakarmapathāvadānamālā*, which were translated from Tocharian A, and states that it basically means ‘feast, festivity; festival, ceremony.’

According to Wilkens, the question is whether the different meanings of *yaŋi kün* can be clarified from Old Turkic alone or whether the Tocharian original (i.e., the term TochA *opšäly*) had this broad meaning, which then enriched the Old Turkic term through semantic translation. According to him, the assumption arises at this point because, as he states, the special meaning of ‘wonder, great (religious) event’ (German ‘Wunder, (religiöses) Großereignis’) can

⁶⁹ On the Tocharian background of the OUyg. *yaŋi kün*, see also Pinault 2015.

only be justified in the case of Maitrisimit. Wilkens seems to be right about this, because the meaning of ‘wonder’ does not appear in the entry *opšāly* in the most comprehensive Tocharian A dictionary published by Carling and Pinault.

Winter, Werner (1963): *Tocharians and Turks*.

In this paper, Winter deals with many aspects of Tocharian-Turkic contacts. One of these is the ethnonym *Twqry* as the name of the source language in the colophon of the Old Turkic *Maitrisimit* (late 10th century) translated from the TochA language. The same designation can also be seen in the colophon appended to the end of the Old Turkic manuscript *Daśakarmapathāvadānamālā* (a translation of the Toch. *Daśakarmapathāvadānamālā*). In this translation, too, the original language of the text is designated as *Twqry* in Old Turkic. Winter questions whether “*Toxri*,” the common transcription of OTu. *Twqry* at the time, actually refers to the TochA language, and, if so, whether “*Toxri*” is the same as Lat. *Tochari*. Based on the two translations above, I think we do not have to doubt that the Old Turkic designation *Twqry* referred to the Tocharians, since both Old Turkic texts are translated from Tocharian. As for the OTu. *Twqry*, as I have already shown before, “*Toxri*” and similar readings are not justified. It should be read as *Tuyre*.⁷⁰ *Tuyre* goes back to the Sogdian adjective form <twyr’k> *Tuyrak* (i.e., OTu. <twqry> *Tuyre* ← Sogdian **Tuyre* < *Tuyrak* < *Tugur* + -’k ← *Tugur* ‘Tocharian’).⁷¹ The Lat. *Tochari*, however, is only another name for Tocharians and has nothing to do with *Tuyre*. Winter also deals with the name *Kūsān* for Tocharian B in a Manichaean text in Old Uyghur.

⁷⁰ Aydemir 2009: 165-167.

⁷¹ Aydemir 2009: 165-168. For the reading *Tuyre* in Old Turkic, see also the same ethnonym *Tuyre* (i.e., *twgry-st’n*) in the designation *ch’r twgryst’n /čahār tuyrestān/* ‘The Country of the Four *Tuyre*’ in Middle Persian in Manichaean script (Müller 1918: 577; Henning 1938: 551; see also Durkin-Meisterernst 2004: 330b).

He mentions Turkic proper names and titles included in colophons in Tocharian A texts (e.g., A 302 *kāttum*; A 382 *bhek*, *kārā*, *cor*, and A 399 *hkhātum*).⁷² He mentions Turkic names and titles in Tocharian B colophons, too (e.g., B 289 *ālp*, *arslām*; B 377 *tarkhāne*).⁷³ He further mentions interlinear Turkic glosses in B 187, 199, 324, 325, 328, 329, 330, 331, 375, and states that “speakers of Turkic not only donated manuscripts in B; they also used them.” The manuscript A 394 also contains Turkic glosses, which – according to Winter – could come from a Turk with a modest command of the language B. He notes that “his use of B may reflect rather an attempt to practise this language than an endeavor to reach a deeper understanding of the A text.”

Winter states that “there is evidence only of an actual use of the language B and of its texts by Turks” and “all evidence for actual live contact between Turks and B Tocharians comes from texts found exclusively in the east.” According to him, “evidence for live contact between Turkic and B is available only from the Turfan

⁷² See also *kāttum*, *hkhuttem*, *elāk*, *elā(k)* in A 302 (THT 935) b7 and A 303 (THT 936) a5 (Pinault 2022: 359-360). If *elāk*, *elā(k)* is a proper name of Turkic origin, then we can match it with the Old Turkic *Ilek*, a title of Karakhanid rulers, used as part of their full name, and with *Ellac* in Iordanes (6th c.), the name of Attila’s son (i.e., *Ellac* ← **ellak* < **ellək* < **ellæg* < **ellig* < **hellig*). OTu. *Ilek* originally meant ‘ruler, emperor, king, prince’ (see Rásonyi / Baski 2007: 257). They are all variations of OTu. *Ēlig* ‘ruler, emperor, king, prince’ (*Ēlig* < *Ēllig* in OTu. inscriptions < *él+lig* < *hél+lig* < PTu. **hél* ‘people; tribe, clan’ > OTu. **hél* ~ *ēl* ‘people; realm,’ see also Aydemir 2021: 367-368). In this case, TochB *elāk*, *elā(k)*, and the Hunnic *Ellac* are one and the same (i.e., TochA *elāk* < **ellak* > Hunnic *Ellac*). TochA *elāk*, *elā(k)*, however, does not seem to be of Uyghur origin in Tocharian. I may be wrong, but I suppose, as a working theory, that it may be of Proto-Oguric origin in Tocharian A. It may have been borrowed first by Kushans (i.e., Tocharians) from the Proto-Oguric language of the Bactrian Huns (i.e., Proto-Ogurs) between the 4th and 6th centuries (for the Proto-Oguric language of the Bactrian Huns, see Aydemir 2023b).

⁷³ I.e., TochB *tārhkāne* (Adams 2013: 304). The Thocharian *tārhkāne* cannot be a direct borrowing from Turkic because of the final *-e*. I think the final *-e* surely refers to an Iranian mediation of this Turkic title. It may be mediated by Khotanese (i.e., *tārhkāne* ← ? Khot. **ttarkanä*; cf. Khot. *ttarkanj*, *ttarkana*, Bailey 1939: 95) or by Bactrian (i.e., *tārhkāne* ← ? Bact. *tapxavo* [tarxanə]).

region.”⁷⁴ Thus, contrary to popular belief, Winter appears to believe that Tocharian A and B continued to be used as written and spoken languages long after AD 800 as well. Furthermore, he thinks that there “seems to be no evidence that speakers of B brought Buddhism to the Turks; loanwords rather show an agreement between Turkish and Tocharian A,” and “that Tocharian A was the, or, at least, one language of Buddhist missionarizing of the Turks.” According to him, one of the reasons that the Buddhist religion came to the Turks through the mediation of the A people may be that “the Turks lived in the vicinity of the A Tocharians.” This statement of Winter also presupposes a live contact between Turks and the speakers of Tocharian A. I completely agree with Winter, as I myself came to the conclusion that the Turks and Uyghurs were in contact with speakers of both the Tocharian A and B languages. In other words, contrary to popular belief, neither the Tocharian B nor the Tocharian A languages were extinct when the Uyghurs converted to Buddhism.⁷⁵

In the last part of his study, Winter asks the question of whether non-Buddhist linguistic borrowing occurred between Turkic and Tocharian. In this connection, he discusses the possible etymologies of Tocharian *koṃ*, and Tocharian *kaṃ*, as well as the background of Turkic *kün* ‘day, sun’ tochar, which he considers to be of Tocharian origin in Turkic.⁷⁶ In this context, he also examines the origins of the terms OUyg. *kün täñri* ‘sun; sun-god,’ Tocharian *koṃñkät* ‘sun-god,’ Tocharian *kaṃñäkte* ‘sun-god’ and draws attention to the parallelism of OUyg. *ay täñri* ‘moon; moon-god,’ Tocharian *maññkät*, Tocharian *meññäkte* ‘moon-god’, in which the first member corresponds to ‘month; moon,’ the second to ‘moon’ as a deity.

⁷⁴ Winter’s statement does not support the general view that “no one believes that the literary languages continued in use long after about 800 CE, and we have no cause for assuming that the spoken languages survived the death of the written forms for any length of time” (Henning 1978: 216; see also Hansen 2012: 77; Wilkens 2016a: 205). For the facts that refute this general view, see Aydemir 2023.

⁷⁵ See Aydemir 2023.

⁷⁶ See also Winter 1984 below.

Winter identifies TochA *koṃ*, and TochB *kaṃ* as inherited words. Based on this, he suggests that not the word *koṃ* ‘day; sun’ itself was borrowed from Tocharian A, “but rather the compound term for ‘sun-god,’ a term which was in part translated into Turkish, and from which the term for ‘sun, day’ was then subsequently extracted.” He finally draws the conclusion that the terms in question may be pre-Buddhist borrowings in Turkic and that contacts between Turks and Tocharians may have “occurred at a date close to the beginning of the Christian era. This seems to indicate the presence of both Turks and Tocharians in the general area to the north of Tibet at a time about three quarters of a millennium prior to the date of the oldest Turkish texts that have survived, and perhaps about half a millennium earlier than the date of our oldest Tocharian manuscripts.”

According to Adams too, the TochB *kaṃ*, and TochA *koṃ* are of Tocharian origin.⁷⁷ Winter’s suggestions, however, encounter many difficulties. In any case, it is by no means possible that a loanword with a velar vowel (i.e., *koṃ* / *kaṃ*) was borrowed into Proto-Turkic with a high-long vowel (i.e., /*ū̄*/, see OTu. *kū̄n* ‘day; sun’). This is phonetically impossible because Proto-Turkic had both /o/ and /u/. If *kū̄n* were a loanword from Tocharian, it should have entered Proto-Turkic with /o/ or /u/, not with /*ū̄*/. This phonetic circumstance alone is enough to rule out the possibility of considering the Turkic *kū̄n* to be of Tocharian origin. First of all, however, for phonological, morphological, and semantic reasons, I can say with certainty that Turkic *kū̄n* is not a loanword from Tocharian but is a word of definitive Turkic origin. However, my explanations regarding this will go beyond the scope of this paper, so I will discuss it in a separate study.

Winter, Werner (1984): *Studia Tocharica. Selected Writings – Ausgewählte Beiträge.*⁷⁸

⁷⁷ See Adams 2013: 225.

⁷⁸ A lecture presented at the University of Aarhus, Denmark, on 22 March 1961 (see Winter 1984: 291).

In this paper, Winter's interest is centered on "Chinese Turkestan," i.e., Xinjiang, especially on Kucha, Karashahr, and Turfan, and on the eleventh century in time, when Islam reached out to Xinjiang. Based on the local documents, he points "to the fact that the local population of the area was not eradicated but rather absorbed." Based on the Tocharian loanwords in Old Uyghur documents, he suggests that the Tocharian A "was one of the languages, if not *the* language, of the Buddhist mission among Turks." Winter thinks that there is a "total lack of Turkish features" in Tocharian textual material due to the fact that "the area in which possibly Turkish influence could be traced, that of military and political organization, is not covered by our texts." Another reason is that the secular data in Tocharian texts remains scarce. He argued that with the exception of one, "apparently no genuine Tocharian words have so far come to the light in Turkish...; however, the shape of some ultimately Indic words in Turkish strongly suggests a mediation" (e.g., Skr. *Ānanda* 'companion of the Buddha', TochB *Ānande*, TochA *Ānand* ~ *Ānant* → OUyg. *Anand* ~ *Anant*, etc.). At the end of the paper, he focuses on TochB *kaum* 'sun; day', TochA *kom* 'day; sun' and Turkic *kün* 'id.' as well as the parallelism between TochB *kaumñäkte* 'sun-god', TochA *komñkät* 'id.', and OUyg. *kün täñri* 'sun; sun-god.'⁷⁹ He raises the question that if *kün täñri* "is a partial calque on *komñkät* (or vice versa), could not *komñkät* itself be a calque?" He compares both Tocharian and Old Uyghur forms with the term for 'sun,' *hvarəxsāēta-* 'sun-lord,' i.e., a deity associated with the sun in Avesta. He assumes that the term **hvanxšaēta-* (~ **xunxsaēta-*) "was adapted to Tocharian use by partial borrowing, partial loan translation (*ñäkte* is 'lord' as well as 'god'). The Tocharian term then was handed on to the Turks who repeated the procedure of replacing the one foreign element by its native equivalent." However, he does not consider this a conclusive argument.

⁷⁹ See also Winter 1963 above.

Wang, Penglin (1995a): *Tokharian Words in Altaic Regnal Titles.*

Wang examines “a number of Altaic regnal titles, including honorific titles, official titles, and personal names of rulers,” which, in his opinion, have etymological connections with Tocharian words. In this connection, Wang attempts “to describe phenomena concerning the psychological process underlying the name-giving practice of the Inner Asian peoples.” He attaches “prime importance to the cultural and religious attributes that,” in his opinion, “affect semantic change in titular terms.” Thus, he fits “sun-god worship” and “the shamanistic way of thinking” into his investigation and methodology of etymology. Namely, according to Wang, “in the ideological praxis of the Altaic peoples, planetary objects such as the sun, the moon, and stars represent a controlling power over human beings... Consequently, there appear two supplementary ways of thinking: rulers are given an illuminating power and further deified, and the sun is personified.” His etymological investigations are, therefore, based on “the natural objects and phenomena that shamanism worships and sacrifices include but are not limited to: the sun, the moon, sky, star, thunder, light, day (brightness), night ancestors, genii, air, wind, cloud, mountain, sea, river, tree, fire, and animals.” This kind of approach does not actually pose any problems in etymological studies and Central Asian name-giving practices. However, for this, the etymology methodology must be very solid. Unfortunately, we cannot see this solidity in Wang’s etymology method, which exhibits characteristics of the “Voltaire effect.”⁸⁰ Namely, it is impossible to accept Wang’s extremely speculative explanations, which contain very serious methodological problems, are built on multiple chain assumptions, and are phonetically, phonologically, morphologically, and semantically forced interpretations. The result of this is that he tries to connect etymologically unrelated things and proposes forced etymological

⁸⁰ I call this phenomenon, which is frequently seen in etymological studies, the “Voltaire effect.” As is well known, Voltaire once sarcastically defined etymology as something like, “*Etymology is a science in which vowels signify nothing at all and consonants very little.*”

solutions. Thus, his etymological solutions are typical cases of “illusory correlation.” Therefore, it does not make much sense for me to refute all of his Tocharian-Turkic-related etymologies. So I will only present some typical cases of his illusory etymologies.

(1) According to Wang, TochA *ārki* ‘white’ originally meant ‘sunshine, sun’ and was developed from an older form **aski* (i.e., “*ārki* < **aski*”). According to him, some other Tocharian and Old Turkic words are also connected etymologically with **aski*; i.e., TochA *arkamām* ‘cemetery,’ TochB *erkenma* ‘id.’ Wang’s etymological interpretation is not plausible because the older form of TochA *ārki* and TochB *ārkwi* is PTo. **ārkw(ä)i* a derivative of PIE **h₂erǵ-* ‘bright, white.’⁸¹ In connection with *ārki*, he further argues that *Argi*, the Tocharian name of the present-day Karashahr, i.e., Yanqi (焉耆),⁸² had the meaning ‘the sun-god place’ or ‘the Holy Land.’ This view is also not tenable because *Argi* is an ethnotoponym, and this region was called *Argi* because the Tocharian A group (i.e., *Yuezhi*) called *Argi* (< *Ārki*) lived here.⁸³ He also associates the words OTu. *erk* ‘authority; free-will, independence’ and *alka-* ‘to praise’ with TochA *ārki* ‘white,’ which, according to Wang, originally meant ‘sunshine, sun.’ As for *erk*, it goes back to PTu. **hērk* ‘authority; free-will, independence’ (cf. PTu. **hērk+(i)n* ‘a title of tribal chiefs’ → OMoHT *hērgin*, OTib. *hirkin*, EMC *xijkin* 希董, EMC *yetkin* 頡斤 / 頡筋);⁸⁴ *alka-* is, however, not a noun, but a verb form in Turkic and surely has nothing to do with *ārki* or **aski*. He associates *ārki* and **aski* with the OTu. *Askel*, a title and ethnonym of Turkic origin. He further thinks that the OTu. verb *alka-* ‘to praise’ and *Askel* “represent and etymological doublet.” This, however, is an illusory correlation. Namely, *Askel* is a secondary form of WPTu. **Sēkel* [sekəl], a Proto-

⁸¹ Adams 2013: 53.

⁸² *Argi* has also been attested in the form of *Argiya*, ‘a man from Argi’ in the Niya documents (Henning 1938: 571).

⁸³ See Aydemir 2019: 264-265, 282.

⁸⁴ See Aydemir 2021: 411.

Turkic ethnonym of Turkic origin,⁸⁵ and has absolutely nothing to do with *ārki*, **aski*, or *alka-*.

(2) One other illusory etymology offered by Wang concerns the OTu. *semiz* ‘fat, fatty’ and TochB *sanāp-* ‘rub in, rub on, anoint, embrocate (prior to washing),’ TochA *snum* ‘perfume.’ The word *semiz* cannot be in etymological connection with the Tocharian words in question because it is a derivation of the PTu. **sem-* ~ **semi-* (> Turkish dialectal *sem-*) **‘to absorb, soak up, suck up (a liquid or fluid as nutriment);’* i.e., **sem-(i)z* or **semi-(i)z* > *semiz*.⁸⁶ As for the Tocharian forms, TochB *sanāp-* (Wang: *sonop-*)⁸⁷ goes back to a pre-Khotanese **zānāf-* (Khotanese *yzānāh-*) ‘wash’ < Indo-Iranian **snāp-*⁸⁸ and TochA *snum* probably to an IE **snu-*.⁸⁹ Thus, OTu. *semiz* has nothing to do with TochB *sanāp-* and TochA *snum*.

(3) Wang associates TochA *māskit* ‘prince, princess’ with the OTu. *bilge* ‘a wise man.’ The two words have nothing to do with each other because *bilge* is an unquestionable derivative of the verb base *bil-* ‘to know’ and the well-known deverbal noun suffix *-gA* (i.e., *bil-ge* > *bilge*).

Wang has many other illusory etymologies concerning Tocharian and Turkic words, not only in this study but in other studies as well. However, I will refrain from the discussion of his other etymologies and studies here because it is clearly evident from the above that Wang’s etymological suggestions are preconceived and do not meet even the mildest phonetic, phonological, or semantic requirements or norms. Thus, both his etymologies and studies can be completely ignored in Tocharian-Turkic language contact research.

Acknowledgments

⁸⁵ Gr. *ἄσκηλ* **[äskel]* (= Eskel) ← Sog. **skl* [əskel] < Sog. **skl* [skel] < Sog. **skl* [səkəl] ← WPTu. **Sēkel* [sekəl] (= Hun. *Székel*) < PTu. **Sekel* [sekəl] (see Aydemir 2021: 432).

⁸⁶ For more information on the etymology of *semiz*, see Aydemir 2005: 20-24.

⁸⁷ I.e., TochB *sonopä-*, the present of class I.

⁸⁸ Adams 2013: 737-738.

⁸⁹ Poucha 1955: 381; cf. *snu-* ‘pant, sniff, snort, pusten’ (Pokorny 2007: 2812).

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Abbreviations

Bakt.	Baktrian
Chuv.	Chuvash
CTu.	Common Turkic
<i>dial.</i>	dialectal
<i>è</i>	only in Turkic words; it corresponds to close-mid [e] in the IPA system.
DLT	see Dankoff / Kelly 1982–1985, Clauson 1972
EDAL	see Starostin / Dybo / Mudrak 2003
EMC	Early Middle Chinese, see Pulleyblank 1991
ÈSTJa	see Sevortyan 1974
Hak.	Khakas
Hun.	Hungarian
IE	Indo-European
<i>intr.</i>	intransitive
Ir.	Iranian
KB	Kutadgu Bilig, see Clauson 1972
Khot.	Khotanese

⁹⁰ For the first part, see Aydemir 2023.

Kmk.	Kumyk
LHan	Late Han, see Schuessler 2007
LMC	Late Middle Chinese, see Pulleyblank 1991
Ma.	Manchu
MTu.	Middle Turkic
OMoHT	Old Mongolian Huis Tolgoi inscription
OTib.	Old Tibetan
OTu.	Old Turkic
OUyg.	Old Uyghur, see Wilkens 2021
PAlt.	Proto-Altaiic
PBulg.	Proto-Bulgarian
PIE	Proto-Indo-European
PMo.	Proto-Mongolic
pn.	proper name
POg.	Proto-Oguric
PTu.	Proto-Turkic
PTuD	Dybo's Proto-Turkic reconstruction
Sog.	Sogdian
Skr.	Sanskrit
SL	source language
SSTu.	South Siberian Turkic
Tat.	Tatar
Tkm.	Turkmen
Toch.	Tocharian
TochA	Tocharian A, see Carling / Pinault 2023, Poucha 1955
TochB	Tocharian B, see Adams 2013
<i>tr.</i>	transitive
Trk.	Turkish
Trk. dial.	Turkish dialectal form, see Derleme Sözlüğü
TTVIII	Gabain 1954
Tun.	Tungusic
VdSUA.	Die Veröffentlichungen der Societas Uralo-Altaica
WMo.	Written Mongolian, see Lessing 1960
WOTu.	West Old Turkic
WPTu	West Proto-Turkic

References

- Adams, Douglas Q. (1988): *Tocharian Historical Phonology and Morphology*. New Haven, Connecticut: American Oriental Society.
- Adams, Douglas Q. (2013): *A Dictionary of Tocharian B: Revised and Greatly Enlarged*. New York – Amsterdam: Rodopi.
- Ashmarin, Nikolai Ivanovich [Ашмарин, Николай Иванович] (1929): *Словарь чувашского языка*, Вып. 2. Казань: Народный комиссариат по просвещению Чувашской Автономной Советской Социалистической Республики.
- Ashmarin, Nikolai Ivanovich [Ашмарин, Николай Иванович] (1941): *Словарь чувашского языка*. Вып. 15. Казань: Народный комиссариат по просвещению Чувашской Автономной Советской Социалистической Республики.
- Aydemir, Hakan (2005): The Main Pillars of the Turkic Rhotacism-Zetacism, I: *sämiz, sämir-, sämri-, semre-*. *Studia Etymologica Cracoviensia* 10, 5–34.
- Aydemir, Hakan (2007): *Untersuchung zum Wortschatz der alttürkischen Xuanzang-Biographie: mit besonderer Berücksichtigung von Buch IX*. Unpublished Master's Thesis. Georg-August-Universität Göttingen (Germany).
- Aydemir, Hakan (2023b): Baktriya Hunlarının Dili Üzerine. Csilla Balogh / Hakan Aydemir (ed.): *Disiplinlerarası Hun Araştırmaları. Uluslararası Hun Araştırmaları Sempozyumu, 13–14 Kasım, 2023, İstanbul, Türkiye. Bildiri Kitabı – Interdisciplinary Hun Studies. International Symposium for Hun Studies, November 13–14, 2023, Istanbul, Türkiye. Proceedings Book*. Çanakkale: Paradigma Akademi Yayınevi, 77–92.
- Bailey, Harold W. (1939): Turks in Khotanese Texts. *The Journal of the Royal Asiatic Society of Great Britain and Ireland* 1, 85–91.
- Bailey, Harold W. (1979): *Dictionary of Khotan Saka*. Cambridge: Cambridge University.
- Balci, Onur (2012): Kaplan Kelimesinin Kökenbilimsel İncelenmesi. *CÜ Sosyal Bilimler Dergisi*, 36(1), 273-280.

- Bloomfield, Leonard (1933): *Language*. New York: Holt, Rinehart & Winston (second improved edition London: Allen & Unwin, 1935).
- Burrow, Thomas (1940): *A Translation of the Kharoṣṭhi Documents from Chinese Turkestan*. London: The Royal Asiatic Society.
- Dankoff, Robert / Kelly, James (1982–1985): *Maḥmūd al-Kāšgarī. Compendium of the Turkic Dialects (Dīwān Luġāt at-Turk)*, Vol. 1–3. Sources of Oriental Languages and Literatures 7. Duxbury: Harvard University Printing Office.
- Derleme Sözlüğü = *Türkiye’de Halk Ağzından Derleme Sözlüğü*, Cilt 1–12. Ankara Türk Dil Kurumu Yayınları, 1993.
- Durkin-Meisterernst, Desmond (2004): *Dictionary of Manichaean Texts*, Vol. III. 1: *Texts from Central Asia and China (Texts in Middle Persian and Parthian)*. Turnhout: Brepols Publishers.
- Fedotov, Mikhail Romanovich [Федотов, Михаил Романович] (1996): *Этимологический словарь чувашского языка*, Том 1–2, Чебоксары: Чувашский государственный институт гуманитарных наук.
- Gabain, Annemarie von (1954): *Türkische Turfan-Texte VIII*. Berlin: Akademie-Verlag.
- Hansen, Valerie, (2012): *The Silk Road: A New History*. Oxford: Oxford University Press.
- Krause, Todd B. / Slocum, Jonathan (2023): *Tocharian Online: Series Introduction*. University of Texas at Austin. Retrieved 15 August 2023. <https://lrc.la.utexas.edu/eieol/tokol>
- Lessing, Ferdinand D. (1960): *Mongolian-English dictionary*. Berkely – Los Angeles: University of California Press.
- Oda, Juten (2015): *A Study of the Buddhist Sūtra Called Säkiz Yükmäk Yaruq or Säkiz Törlügin Yarumış Yaltrımış in Old Turkic*. Berliner Turfantexte XXXIII. Turnhout: Brepols Publishers.
- Pinault, Georges-Jean (2022): Colophons in Tocharian Manuscripts. In: Nalini Balbir / Giovanni Ciotti (eds.): *The Syntax of Colophons. A Comparative Study across Pothi Manuscripts*. Studies in Manuscript Cultures 27. Berlin: De Gruyter, 347–372.
- Pokorny, Julius (ed.) (2007): *Proto-Indo-European Etymological*

- Dictionary – Indogermanisches Etymologisches Wörterbuch. Dnglu Adsoqiation – Indo-European Language Association. http://elibrary.bsu.edu.az/files/books_400/N_337.pdf (Retrieved 15 August 2023)
- Poucha, Pavel (1955): *Institutiones linguae tocharicae*, Pars 1. *Thesaurus linguae tocharicae, dialecti A*. Praha: Státní pedagogické nakl.
- Pulleyblank, Edwin G. (1991): *Lexicon of Reconstructed Pronunciation in Early Middle Chinese, Late Middle Chinese, and Early Mandarin*. Vancouver: UBC Press.
- Rassadin, Valentin Ivanovich [Рассадин, Валентин Иванович] (2005): *Словарь Тофаларско-Русский и Русско-Тофаларский*. Санкт-Петербургу: “Дрофа”.
- Räsänen, Martti (1969): *Versuch eines etymologischen Wörterbuchs der Türk sprachen*, Band 1–2. Helsinki: Suomalais-Ugrilainen Seura.
- Rásonyi, László / Baski, Imre (2007): *Onomasticon Turcicum – Turkic Personal Names*, Parts 1–2. Indiana University Uralic and Altaic Series 172. Bloomington, Indiana: Denis Sinor Institute for Inner Asian Studies.
- Róna-Tas, András (1975): *Böz in the Altaic World*. *Altorientalische Forschungen* 3, 155–163.
- Röhrborn, Klaus (2015): *Uigurisches Wörterbuch. Sprachmaterial der vorislamischen türkischen Texte aus Zentralasien. Neubearbeitung*. Bd. 2, *Nomina – Pronomina – Partikel*, Teil 1: *a - asvik*. Stuttgart: Franz Steiner Verlag.
- Schuessler, Axel (2006): *ABC Etymological Dictionary of Old Chinese*. ABC Chinese Dictionary Series Honolulu: University of Hawai’I Press.
- Sevortyan, Ėrvand V. [Севортян, Эрванд В.] (1974): *Этимологический словарь тюркских языков*, Том 1. *Общетюркские и межтюркские основы на гласные*. АН СССР. Ин-т языкознания. Москва: Наука.
- Thomason, Sarah G. (2001). *Language Contact: An Introduction*. Edinburgh: Edinburgh University Press.

- Vovin, Alexander (2018): Fabrication of Turkic *böz* ‘fabric’ in Japan and Korea. *Acta Orientalia Academiae Scientiarum Hungaricae* 71(3), 263–284.
- Wilkens, Jens (2007): *Das Buch von der Sündentilgung. Edition des alttürkisch-buddhistischen Kšanti Kilguluk Nom Bitig*. 1-2. Berliner Turfantexte 25. Turhout: Brepols Publisher.
- Wilkens, Jens (2016): Buddhism in the West Uyghur Kingdom and Beyond. In: Carmen Meinert (ed.): *Transfer of Buddhism across Central Asian Networks (7th to 13th Centuries)*. Dynamics in the History of Religions 8. Leiden–Boston: Brill, 191–249.
- Wilkens, Jens (2021): *Uigurisches Wörterbuch. Sprachmaterial der vorislamischen türkischen Texte aus Zentralasien*. Bd. 3. *Fremdelemente*, Teil 1: *ec – bodis(a)v(a)tv*. Stuttgart: Franz Steiner Verlag.