Tocharian Loan Words in Old Chinese:
Chariots, Chariot Gear, and Town Building

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In this paper I am going to present the first results of a long-term project, which started a few years ago, when my colleague George van Driem, a specialist in the field of Sino-Tibetan linguistics, asked me to look for possible Indo-European (*in casu*, Tocharian) loan words in Old Chinese. We have known for 80 years (since Polivanov 1916) that the Chinese word for honey is likely to be of Indo-European, probably Tocharian, origin:

Chin. *mì* 蜜 'honey' < EC *mjit* < OC **mjit/*-*mit*
Toch. B *mit* 'honey' < PToch. **m'ət*- < PIE -*medʰu*-.

The question is whether there are more Tocharian loan words that can be discovered in the Old Chinese vocabulary.[1]

As a starting point, I have used the magnificent book on Old Chinese phonology by William H. Baxter (1992). On the one hand, this book gives an account of the ways in which Old Chinese phonology can be reconstructed and presents the newest insights on the matter, being a synthesis of important studies by Pulleyblank, Jaxontov, Li, Bodman, and Starostin, who have pursued the pioneering efforts of Karlgren. On the other hand, Baxter has proposed several important improvements for the reconstruction of Old Chinese and presented a coherent phonological system.[2] Most important for our purpose, however, is the fact that this book contains a corpus of more than 2,000 reconstructed Old Chinese words. In Appendix C of his book, Baxter presents the reconstruction of the rhyme words of the *Shijing* "Book of Odes", a collection of Old Chinese poetry, the oldest portions of which are considered to date to the beginning of the first millennium BCE, although the collection as

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[1]Other possible Chinese loan words from Tocharian, discussed by Pulleyblank on several occasions (e.g. Chin. *shīzi* 獅子 'lion'—Toch. B *secake*, Pulleyblank 1962: 109, 226, 1995: 427f.; Chin. *yānghuǐ* 央匱 'asafoetida'—Toch. *ankwas*, Pulleyblank 1962: 99 with ref.), concern *Wanderworte*, of unknown etymology, so that their Tocharian provenance cannot be ascertained.

[2]I would like to stress that, in spite of the ongoing debate concerning particular points, there is a great deal of consensus about the principles and the results of the reconstruction of Old Chinese. To my knowledge, the disagreement among scholars does not affect my study in any significant way.

a whole was reedited toward the end of that millennium. In the case of the *Shijing*, we have a corpus limited to a certain degree in time and space, which has clear methodological advantages. In addition to the rhyme words of the *Shijing*, I have made use of the Old Chinese reconstructions mentioned by Baxter in the main text of his book. All in all, the Old Chinese corpus in which I have been searching for Tocharian loan words consists of some 2,400 words.[3]

Meanwhile, work on Old Chinese reconstruction has continued, and as Professor Baxter told his audience during a mini-course in Leiden (summer 1995), the reconstruction can now be refined in some respects.[4] I have given his new reconstructions after a slash.

Tocharian, the easternmost representative of the Indo-European family, is attested in two dialects or languages, known as Tocharian A and Tocharian B. The bulk of the texts composed in Tocharian is religious literature, almost entirely of Buddhist origin. This fact greatly influenced the attested Tocharian vocabulary, only a small portion of which consists of terms pertaining to everyday life. Even a quick look at the Tocharian vocabulary reveals that we are dealing with literally hundreds of loan words from Sanskrit, Prakrit, and Iranian, so that the inherited lexicon is rather limited. On the contrary, the poems of the *Shijing* are of a non-religious nature, abounding in descriptions of nature and everyday life. It is therefore *a priori* to be expected that the amount of demonstrable loan words will be small.

Another point which hampers the comparison is that of chronology. The Tocharian texts were probably written in the period between the 6th and 8th century CE. Even by reconstructing Proto-Tocharian, we presumably cannot reach beyond the 4th century BCE. This means that there still is a considerable gap between the period of possible contacts of Tocharians with the Chinese and the reconstructed Proto-Tocharian. Here, some help can be obtained from the Indo-European comparison, since we generally know what the original form must have looked like.

Looking at the Old Chinese vocabulary through the glasses of an Indo-Europeanist involves various methodological dangers. A very large proportion of Old Chinese words is monosyllabic. There are limitations on possible syllable onsets and, especially, codas. This means that the number of possible syllable structures is not very high, the more so as voicedness, aspiration, and nasalization of the initial

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[3]If the Old Chinese reconstruction is given below without any reference, it means that the word can be found in Appendix C (The rhyme words of the *Shijing*) of Baxter's book. Otherwise, I give the number of the example in the body of the book. Baxter's *Handbook of Old Chinese Phonology* is simply referred to as "Baxter".

[4]The changes are largely notational: in particular, Baxter writes *ɨ* as *ə* and interprets the contrast of *CjV* vs. *CV* as *Cï* vs. *CV*.

consonants can be due to original prefixes. If we then tolerate rather loose phonetic and semantic correspondences, we might find an Indo-European parallel for practically every Chinese word. The large amount of look-alikes makes a very strict methodology indispensable. I have used three criteria in order to distinguish between probable loan words and simple look-alikes:

A. The Old Chinese and Tocharian words must match both semantically and phonetically. This rather obvious criterion makes me reject, for instance, the often proposed borrowing of Chin. *niú* 牛 'ox, cow, cattle' < EC *ngjuw* < OC $*ng^wji/*ng^wi$ from PIE $*g^wou$- / g^weH_3u- (Toch. B *kau*[x], A *ko* 'cow'). These words have only one phoneme $*g^w$ in common, which seems insufficient to me.

B1. The Old Chinese word must be isolated in the sense that it has no other cognates than Tibetan. This criterion is based on new insights concerning the dialectal position of Chinese (cf. van Driem 1995). For instance, the connection of Chin. *quǎn* 犬 'dog' < EC *khwenX* < OC $*k^whi/en?/*k^whī/ēn?$ with Toch. AB nom.sg. *ku*, obl. B *kwem*, A *kom* 'dog' < PToch. nom.sg. $*ku$, obl. $*k^wen$ is improbable, in spite of a pretty good phonetic resemblance, because the Chinese word has a Tibeto-Burman etymology (cf. Benedict 1972: 44, who reconstructs *kwiy*).

B2. As a corollary, the Tocharian word must have a good Indo-European etymology. For instance, I am reluctant to assume a Tocharian loan word in the case of Chin. *yíng* 營 < EC *yweng* < OC *wjeng/weng* 'to lay out, plan' (cf. Toch. B *wänk-* 'to prepare'), since the latter lacks an Indo-European etymology.

C. The OC word must belong to a semantic field which is liable to borrowing, e.g. artifacts, social institutions, etc. Consider, for instance, the following OC word family:

Chin. 兌 *duì* 'to open a passage through, clear' < EC *dwajH* < OC *lots/lōts

Chin. 奪 *duó* 'take away, deprive' < EC *dwat* < OC *lot/lōt

Chin. 閱 *yuè* 'opening, hole' < EC *ywet* < OC *ljot/lot*[5]

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[5]Chin. 脫 *tuō* 'to take off, let loose' < EC *thwat* < OC *hlot/*hlōt (Baxter, no. 957),

Chin. 脫 *tuì* 'easy, leisurely' < EC *thwajH* < OC *hlots/*hlōts (Baxter, no. 958), etc. probably also belong here. Pulleyblank 1962: 116, 1973: 116-7, Bodman 1980: 103f. compare Tib. *glod* 'loosen, relax, comfort, cheer up', *lhod, glod, lod* 'loose, relaxed, easy, unconcerned', WB *hlwat* 'free, release', *klwat* 'taken off', *khlwat* 'to take off', *hlwat* 'free', L *flyát, flyót* 'relax, loosen'.

It may appear tempting to connect Toch. AB *lut-* 'to remove, drive away', B *lyauto* 'opening', A *lot* 'hole', cf. also A *lyutaṃ* 'ravine, chasm', B *laute* 'moment, period' (= German 'Abschnitt'), but, in my opinion, at the present stage of our knowledge about Sino-Indo-European contacts, this connection does not deserve serious consideration. This is not to say that words of this semantic category cannot be borrowed—for instance, German *Bresche*, Dutch *bres*, Russian *breš'* 'breach' are all borrowed from French *brèche*, which, in its turn, has been borrowed from Germanic (cf. German *brechen* 'to break')—, but in view of the situation sketched above, when an Indo-European etymology can easily be found for practically every Old Chinese word, we must first refrain from comparing words from the basic vocabulary.[6]

In my paper I shall concentrate on two semantic fields, viz. 'chariots, chariot gear' and 'town building'. There is ample archeological and historical evidence that chariots and fortified towns came to China from the West (see various archeological contributions to this volume and the bibliographies attached to them), so that it is conceivable that the Chinese terminology for chariotry and fortification has been borrowed from an Indo-European language.

Chariots and chariot gear

(1) Chin. 乘 *shèng* 'chariot (with four horses)' < EC *zyɪngll* < OC ⁺*Ljɪngs/* *Ləngs*
Toch. B *klenke*, A *klank* 'vehicle, Skt. *yāna-, vāhana-*', Toch. AB *klānk-* 'to ride, travel (by vehicle)', PIE **kleng-* (cf. Modern German *lenken* 'to guide, conduct', *Wagenlenker* 'charioteer').

The Chinese word is clearly a derivative of *chéng* (same character) 'to mount, ride (in a chariot)' < EC *zying*, which may be reconstructed as OC **Ljing/*Ləng* (as this word is not attested among the rhymes of the *Shījīng*, it is not discussed in Baxter's book). The symbol of the notation **L* in Baxter's reconstruction refers to an unclear initial **l-* cluster which yielded EC *zy-*. It has been pointed out to me by several participants of the conference, however, that this cluster can hardly be OC **kl-*. The reconstruction of the Old Chinese initial **l-*clusters is not easy. Baxter (232ff.) essentially follows Bodman (1980: 108-13, 143-145, 168-171), who assumes **l-*clusters of two types for Proto-Chinese (a stage intermediate between Proto-Sino-Tibetan and Old Chinese). In one type, written ***Kl-*, medial ***l* behaves like medial **r*, so that **l-*

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[6]Note, incidentally, that this Chinese word family has cognates in Burmese (see note 5) and in the Kiranti languages, e.g. Limbu ‹lɔtt› 'to take away, remove', which means that this comparison does not stand the test of criterion B either.

clusters of this type had presumably already merged with *r-clusters by the Old Chinese period. In the other type, written with a hyphen as **$K-l$, the vocalism appears to be unaffected by the medial *l, but the cluster shows a dental reflex (*$k-l- > t-$, *$kh-l- > th-$, *$g-l- > d-$). The phonetic difference between the two types is unknown. What is more important for our purpose is that the phonetic realization of the second type of the *l-clusters in Old Chinese is also unclear. At any rate, it does not seem unreasonable to assume that, at the time of borrowing, Old Chinese no longer had initial *$kl-$, so that the Tocharian initial cluster was replaced by the phonetically closest equivalent.

(2)   Chin. *gŭ* 轂 'nave of a wheel' < EC *kuwk* < OC *kok/*$kōk$
      Toch. B *kokale*, A *kukäl* 'chariot', PIE *k^wek^wlo- 'turning point, wheel' (Skt. *cakrá-*, OE *hweohl* 'wheel', Gr. κύκλος 'ring, circle, wheel', Lith. *kāklas* 'neck', etc.).

The original meaning of the Tocharian word is undoubtedly 'turning point, wheel'. The semantic correspondence with the Chinese word may seem rather loose, but in the Indo-European languages 'wheel', 'nave of the wheel', 'navel', and 'wagon' are often expressed by the same word, cf. Toch. B *kele* 'navel < turning point' (PIE *$k^wol(H)o-$) next to Gr. πόλος 'turning point, axis', OIr. *cul* 'chariot', and, probably, OCS *kolo*, gen.sg. *kolese* 'wheel'.

If this comparison is meaningful, the *o* in OC *kok/*$kōk$ clearly points to the Tocharian provenance.

(3)   Chin. *fú* 輻 'spokes of a wheel' < EC *pjuwk* < OC *$pjik$/*$pək$
      Toch. B *pwenta* (pl.) < PToch. *$paw-$ < *$pull-$ 'spokes of a wheel', cf. Skt. *pavī-* 'felloe' < *$peu(II)-r-$.

According to Bodman (1980: 125ff), OC *-*k may reflect both *-k and *-$ʔ$: "by the time of the Odes, glottal stop had already merged with OC -k as we can tell by poetic rhyming". It is therefore conceivable that *-$ʔ$ reflects an Indo-European laryngeal.

(4)   Chin. *guĭ* 軌 'wheel-axle ends' < EC *kwijX* < OC *$k^wŋuʔ$/*$k^wruʔ$
      Chin. *kuí* 逵 'thoroughfare' < EC *gwŋ* < OC *$g^wŋu$/*g^wru
      Toch. B *kwarsär*, A *kursär* 'league, mile; vehicle, means of salvation', translating Skt. *yoɉana-* and *prayoɉana-* < PToch. *$k^wärsär$.

The Tocharian word is likely to be related to Lat. *currus* 'chariot', *cursus* 'course', etc. (for a discussion of the Indo-European reconstruction see Hilmarsson 1996, s.v. *kwarsär*). The position of *-r-* of the Chinese words is unexpected, but it must be borne in mind that the Old Chinese syllable probably had no final *-r*.

(5)   Chin. *zhōu* 輈 'carriage pole' < EC *trjuw* < OC *^{s}trju/*^{x}tru*
       Toch. A *tursko* 'draft-ox' (?), Skt. *dhúr-* 'carriage pole', Hitt. *tu-u-ri̯a°* 'to
       yoke' < PIE *$^r dʰur(H_1)$-*.

Toch. A *turs-ko* was interpreted as 'draft-ox' by Schmidt (1987: 294f.), but this word is only attested in a fragment without sufficient context, and various details of the reconstruction remain unclear. Note again the metathesis of *-r-* in the Old Chinese word.

(6)   Chin *kuò* 鞹 'leather' < EC *khwak* < OC *^+kʷhak/*$^*kʷhāk$*
       Toch. A *kāc* 'skin, hide' < PToch. *^+kʷac-* < PIE *$^q kuH l-ti$-* (Lat. *cutis*, OIc.
       húð, OE *hýd* 'skin, hide'). For the etymology see Hilmarsson 1985

Although the Chinese word is glossed as 'leather' in the dictionaries, its oldest attestations always refer to chariot vocabulary (Schuessler 1987: 359): leather harness, front-rail casing for a carriage, screen. Therefore, the connection with Tib. *kog-pa/skog-pa* 'rind, shell', Burm. *ə-khok* 'tree bark' (Coblin 1986: 134) seems less probable.
     It is important to point out that the development of PIE *$^*uH$* to *$^*wa$* is only attested in Tocharian.

(7)   Chin. *è* 厄 'part of a yoke' < EC *ʔæk* < OC *$^*ʔrek$/*$^*ʔrēk$*

According to Schuessler (1987: 145), the Chinese word refers to a metal yoke-ring. The purpose of this ring is not quite clear, but a reasonable guess is that the reins went through it to the horse bits. It is therefore tempting to connect OC *$^*ʔrek$/*$^*ʔrēk$* with the Indo-European root *$^*H_3reg$-* 'to make straight, to steer' (Gr. *ὀρέγω*, Lat. *regō*, etc.). In Tocharian, this root is reflected in AB *rāk-* 'to stretch, spread', and in the personal name B *Klenkarako*, for which see Pinault (1987: 81ff) and Isebaert (1993[1994]: 295f). It is of course a hazardous business to etymologize personal names, but considering the fact that B *klenke* means 'chariot', it seems safe to assume that the second part of the compound also refers to chariotry, being either an action noun 'chariot-driving', which is advocated by the mentioned authors, who translate the compound 'ayant la direction du char (ou du cheval attelé)', or a part of the chariot gear. In both cases, the semantics is close enough for a comparison with the Old Chinese word.[7]
     Note that the initial *$^*ʔ$-* of OC *$^*ʔrek$/*$^*ʔrēk$* matches the initial laryngeal of the Indo-European word.

     It may be worthwhile to compare words (1)-(7) with other terms for a chariot and its parts in our Old Chinese corpus. First of all, we

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[7]In Middle Chinese, this word has developed the meaning 'strategic point; to yoke' (Pulleyblank 1991, s.v.).

find two words for a 'wagon, vehicle', viz.

> Chin. *ju* 車 'vehicle' < EC *kjo* < OC ⁱ*k(r)ja*/**k(r)a*
> Chin. *che* 車 'vehicle' < EC *tsyhæ* < OC ⁺*Klrja*/**Klla*

Both words are likely to be etymologically related to the verbs for 'to abide, dwell, stay':

> Chin. *jū* 居 'to stay at, remain, dwell' < EC *kjo* < OC ⁴*k(r)ja*/**k(r)a*
> Chin. *chǔ* 處 'to stay, keep still, dwell' < EC *tsyhoX* < OC **Klrja?*/**Klla?*,
> *chu* 處 'id.' < EC *tsyhoH* < OC ⁱ*Klrjas*/*⁺Kllas*

This fact seems to indicate that Chin. *jū* and *chē* originally referred to a cart where the nomads put all their belongings and where they lived. From the etymological point of view, it would seem not to have been a battle chariot.

Further terms are Chin. *héng* 衡 'yoke of a carriage' < EC *hæng* < OC **grang*/⁴*grāng* and Chin. *jià* 駕 'to yoke' < EC *kæH* < OC **krajs*/*⁺krājs*, for which I could find no Indo-European equivalents. Chin. *héng* also means 'beam, crosspiece, steelyard, weights' (Schuessler 1987: 233), which shows that 'yoke of a carriage' is a derived meaning. As to Chin. *jià* < OC **krajs*/⁴*krājs*, its final -s is most probably a suffix, so that we may connect Chin. *jiā* 加 'to add, attach, hit' < EC *kæ* < OC **kraj*/⁴*krāj*. In this case, too, we may be fairly confident that the verb for 'to yoke' is an indigenous word.

The elaborate nomenclature of horse colors in Chinese does not look Indo-European either. In our corpus there are as many as nine terms for horse colors, but hardly any of them has an obvious Indo-European equivalent. Also the generic word for a horse, Chin. *mǎ* 馬 < EC *mæX* < OC **mra*/**mrā?* is likely to be indigenous or, at least, non-Indo-European. I strongly doubt the correctness of the assumption, frequently found in the literature, that this word is somehow connected with the Celto-Germanic word for 'horse' (OIr. *marc*, OE *mearh*, etc.). The limited distribution of this Indo-European term does not inspire confidence in the proposed borrowing by the Chinese or, for that matter, a borrowing in the other direction (cf. for this word Janhunen's article elsewhere in this volume).

We may conclude that the Chinese knew how to yoke an ox, but were unfamiliar with the more elaborate gear of the battle chariot and spoked wheels (cf. Shaughnessy 1988: 189-237 with further references).

Town building

(8) Chin. *ji* 壁 'masonry' < EC *tsit* < OC **tsjit* < **tsjik*/**tsik* (Baxter, no. 670)

Toch. AB *tsık-* 'to build, form'[8] < PToch. *ʾts'ɘık-* < PIE *$dʰengʰ$-* 'to knead clay, make walls' (cf. Gr. τεῖχος 'wall', Skt. *sam-díh-* 'wall', Av. *paın-daēza-* 'circumvallation', *uz-daēza-* 'wall, dam', OP *dıdā-* 'wall, fort', etc.).

Bodman (1980: 158, cf. also Coblin 1986· 108, Baxter· 301) adduces a clear Tibetan cognate *rtsıg* 'to build, wall up; wall, masonry', so that this word has been borrowed not only in Chinese, but also in Tibetan.

Tocharian is the only Indo-European language where PIE *$dʰ$* > *ts*. As Winter (1962) has shown, PIE *$dʰ$* > PToch. *ts* in the position before another aspirate.

(9)   Chin. *lĭ* 里 'village, hamlet' < EC *lıX* < OC *$C\text{-}rjıʔ$/*$C\text{-}rɘʔ$*[9]

Toch. B *rıye*, A *rı* 'town', PIE *$\underset{.}{u}nH\text{-}eH_2$*, cf. Thracıan βρία, probably /*una*/, mentioned by Strabo 7,6,1 as a Thracian word for πόλις, τεῖχος and glossed by Hesych as κώμη (the etymology originally Smith 1910-11: 43, see further van Windekens 1976: 405). Note that the final *-ʔ* of the Old Chinese word may match the Indo-European laryngeal.

(10) Chin. *yuán* 垣 'wall'; 園 'garden, park' < EC *hjwon* < OC *ʾwjan/wan*
      Toch. AB *want-* 'to envelop, surround' < IE *$uendʰ$-* (cf. Goth. *bı-wından* 'to wrap', Goth. *wands*, OHG *want*, etc. 'wall').

There is yet the third character for the same word, viz. *yuán* 圓 'circle, circumference; recur' (Schuessler 1987: 791), which most probably conveys the original meaning. The loss of the final dental in the Chinese word is not surprising.

Pulleyblank (1973: 121) has pointed out that there exists a whole series of Old Chinese words beginning with *w-*, all meaning 'round, revolve' (cf., for instance, Chin. *yíng* 縈 'to entwine' < EC *yweng* < OC *$wjeng$/*$weng$*). He further conjectured that these words may all be somehow related. At our present state of knowledge about Chinese word families, however, we cannot account for the alternations of the type *wan/*$weng$*, so that borrowing of OC *wan* from Tocharian remains a distinct possibility.

(11) Chın. [*zhēn*] 楨 'post in a wall, support' < EC *trjeng* < OC *$trjeng$/*$treng$*

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[8] The fact that I cite the Tocharian verbal root should not be interpreted in the sense that ıt was the verb that was borrowed into Chinese. Most probably, the source was a Tocharian word for 'wall, masonry' derived from this root, but by chance this word ıs not attested. The same applies, *mutatıs mutandıs*, to examples (10), (11) and (13).

[9] *C-* = "an arbitrary (but probably voiced) consonant" (Baxter· 200).

Victor H. Mair, editor

Toch B *trenk-*, A *trank-* 'to be fixed to', PIE *d^herg^h-* (Av. *drənjaiti* 'to reinforce', Skt. *drhyati* 'to be firm', etc.).

The original meaning of the word seems to be 'post in framework used in rearing earth walls' (Karlgren 1957: s.v. 834l).

(12) Chin. *bi* 堛 'wall' < EC *pek* < OC *$^*pek/^*pēk$* (Baxter 159)
Toch. B *pkante*, Toch. A *pkant* 'hindering, obstacle' < PToch. *$^*pəkənte$*,
PIE *$^*b^heg$-* 'to break' (van Windekens 1976: 376)

If the Chinese word is a borrowing from an Indo-European language, its voiceless stops point to probable Tocharian origin.

(13) Chin. *chéng* 城 'city wall, fortified wall' < EC *dzyeng* < OC *$^*djeng/^*deng$*
Toch. AB *tank-* 'to hinder, impede' < PIE *$^*teng^h$-*

Although the semantic side of the equation is quite attractive (cf. the preceding equation) and words for 'city wall' are frequently borrowed (cf. Lat. *vallum*, borrowed to OE *weall*, English *wall*, MHG *wal*, whence it was borrowed as Polish *wał*, Russ. *val*, etc.), this example is not without problems. First of all, if the Chinese word for 'wall' is connected with the verb *chéng* 成 'to achieve, complete' (which is far from evident from a semantic point of view), the borrowing from Tocharian is of course out of the question. Further, EC *dzyeng* is ambiguous, as it can reflect both OC *$^*djeng/^*deng$* and OC *$^*gjeng/^*geng$* (cf. Baxter: 211f.). Bodman (1980: 160) opted for the second reconstruction and connected the Chinese word with Tib. *hgengs* 'to fill, fulfill', *gyang, gyeng* 'pisé, rammed earth'. This etymology is not very probable, however. In answer to my query, Professor Baxter writes to me (May 8, 1996): "As for *chéng < $^*deng$* 'complete', according to the Shuowen it is composed of *wŭ < $^*m(r)us$* 'cyclical sign' (Karlgren 1957: s.v. 1231a), plus *dīng < $^*tēng$* '4th heavenly stem' as phonetic; this would presumably support the reconstruction *$^*deng$*. But this is not confirmed by older paleographical evidence. Also, there seem to be several cases where 'complete' interchanges with *píng < $^*breng$* 'level, even'; I don't know what's going on there. But although *$^*geng$* would be a theoretical possibility, I don't know of any positive evidence for a velar. The connection with *$^*breng$* (if there's anything to it at all) would not necessarily extend to 'wall', though; that character might have been created after *chéng* 'complete' already had some kind of dental or even affricate."

Conclusions

We may formulate the following tentative conclusions:
1. Apart from the word for 'honey', there are several other Old Chinese words which are likely to be borrowings from an Indo-

European language. We may indicate at least two semantic fields where borrowing took place: chariots/chariot gear and town building.

2. Some of these loan words can be positively identified as borrowings from Tocharian: this is the case with words (1), (2), (5), (6), (8), (12) and, possibly, (9). There are various reasons for this identification: for (1) and (9) it is the limited distribution of the particular word in Indo-European languages; for (2) it is the specific development of $*k^w ek^w$ to Toch. B *kok*; for (5) and (12) it is the Tocharian merger of voiced and voiceless stops; for (6) it is the unique Tocharian development of $*uH$ to $*ua$ between consonants; and, finally, for (8) it is the unique Tocharian development $*d^h > ts$ in the position before another aspirate.

Abbreviations

Av.   Avestan
Burm.   Burmese
Chin.   (Modern) Chinese
EC   Early Chinese
Hitt.   Hittite
MHG   Middle High German
OC   Old Chinese
OCS   Old Church Slavonic
OE   Old English
OHG   Old High German
OIc.   Old Icelandic
OIr.   Old Irish
OP   Old Persian
Goth.   Gothic
Gr.   Greek
L   Lepcha
Lat.   Latin
PIE   Proto-Indo-European
PToch.   Proto-Tocharian
Skt.   Sanskrit
Tib.   Tibetan
Toch.   Tocharian
WB   Written Burmese

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