

A REVIEW OF V. A. CHIRIKBA'S "COMMON WEST CAUCASIAN"

This is a very important book, in fact, starting the discussion of Proto-West-Caucasian (PWC) on an entirely new level. It contains abundant material from all West Caucasian languages and a consistent reconstruction of Common Abkhaz, Common Circassian and Common West Caucasian phonological systems.

In this review I shall dwell mainly upon the differences between Chirikba's reconstruction and my reconstruction of Common West Caucasian (CWC) as presented in [NCED]. I shall try to be objective and acknowledge valuable additions and emendations. I am ready, however, to defend several aspects of the CWC reconstruction presented in [NCED] and dismissed by the author.

1. Reconstruction of Common Abkhaz

The Common Abkhaz system of consonants reconstructed by Chirikba virtually coincides with the system presented in [NCED], except for two additions (**p^w* and **v*) and one elimination (**ʔ*).

I would agree with the reconstruction of **v*: although this phoneme is reconstructed only in one root (**vəɾə-vəɾə* 'sound of swiftly turning round'), the root is present in several Abkhaz dialects and fills a slot available in the system. There are also other cases of phonemes attested only within a single root in North Caucasian languages — not surprising because of their huge consonantal inventory.

The reconstruction of labialised **p^w* is more dubious: this phoneme is also reconstructed only on the basis of one root (*-*p^wə* in **šə-p^wə* 'foot',

**na-p^wə* 'hand'), and its reflexes differ from those of **p* only in one dialect (Ashkharywa). Especially strange is the fact that CA does not possess any other labialised labial consonants (there are no **p^w* and **b^w* either in my reconstruction or in Chirikba's). Therefore, I strongly suspect that the variants *šap^wə*, *m^wpə* in Ashkharywa (note that *šapə* and *m^wpə* are also attested) reflect just a positional articulation of *p* in a final stressed syllable with a mid vowel -ə.

My reconstruction of **ʔ* in CA was based on the specific correspondence of Tapanta *ʔ* to *q̇* in other Abkhaz dialects (within clusters **ʔ* sometimes gets lost). There are several roots demonstrating this correspondence: SAbkh. *a-maqá* : Tap. *m(a)ʔá* 'girdle, belt'; SAbkh. *-da* : Tap. *-dʔa* 'without' (a privative suffix); SAbkh. *zaqá* : Tap. *zʔa-rá* 'how many'; SAbkh. *á-šaqá* : Tap. *šʔa* 'pillar, stanchion'; SAbkh. *a-š^vqá* : Tap. *š^wʔa* 'letter, document'; SAbkh. *-qa* / *-a* : Tap. *-ʔa* 'a locative suffix'; SAbkh. *-qa-* : Tap. *-ʔa-* 'to be'.

V. Chirikba suggests that Tap. *ʔ* may be a positional variant of *q̇*, but no rules of positional distribution are given. I, therefore, cannot agree with the elimination of **ʔ* from the CA system. Chirikba's objection that *ʔ* is present only in Tapanta is not quite clear to me: there are lots of phonemes in CA reconstructed only on the basis of one dialect (for example, all the palatals — **č*, **ć*, **ś*, **ž* — are only preserved in Bzyp yet are still clearly reconstructable for CA).

V. Chirikba reconstructs a number of consonant clusters for CA, pointing out (p. 76) that "in principle, correspondences of consonants in clusters are practically identical with those of single consonants". This is another difference from the system presented in [NCED], where no consonant clusters are reconstructed for PA.

As a matter of fact, it is rather easy to show that the mid vowel -ə- in Abkhaz can only exist in a stressed position and is lost in an unstressed syllable: cf. *á-pš^vma* 'host' < **á-pš^vəma* vs. *apš^vəma-k* 'one host' etc.). This rule is violated only in a few cases when it leads to formation of phonetically illicit consonant clusters (cf. *á-ħ^wəzba* 'knife'; sometimes a free variation -ə-/-Ø- occurs in such cases, cf. *a-ħ^wənč^vá* along with *a-ħ^wənč^vá* 'dirt' etc.). Therefore, all consonant clusters in Abkhaz can in fact be analysed as a result of -ə-elimination (sometimes with following assimilations) — which is exactly what was done in [NCED]. The only possible source for reconstructing real clusters in CA could be cases of the correspondence CC : C in Abkhaz dialects (like SAbkh. *á-bħ^wa* : Tap. *ħ^wa* copper etc., see the list in [Chirikba: 77]). These cases, however, are too few and unsystematic, and cannot be regarded as anything other than late dialectal variations.

2. Reconstruction of Common Circassian (CC)

Here Chirikba basically follows the classical reconstruction of Kuipers [Kuipers 1963]. His own major addition is the reconstruction of CC stress patterns in bisyllabic words, based on his own field recordings of Temirgoj and Abadzakh stress (pp. 166–170), and coinciding rather neatly with the reconstruction obtained by S. Nikolayev [NCED: 198] solely on the basis of vocalic correspondences between bisyllabic roots.

3. Reconstruction of the Common West Caucasian (CWC) system

This is the part of the book that contains the most differences between Chirikba's and my reconstructions. Some preliminary remarks are needed.

The set of consonants reconstructed by Chirikba for CWC is actually a subset of the system presented in [NCED]. He expresses "serious doubts as to the reliability of such a huge phonemic inventory, reaching a total of 168 consonants" (p. 12). His own system, however, reaches 110 consonants (see the chart on pp. 174–178), which is still much more than in any living language. The problem with consonant systems of the WC type is actually not the abundance of consonants: it is the almost algebraic distribution of distinctive features within the system. Thus, the features of palatalisation and labialisation are perfectly well known and widely spread in the languages of the world, but a complete distribution (plain consonants : palatalised consonants : labialised consonants : palatalised labialised consonants) is fairly rare. In fact, in such a system one can think of additional distinctive features (palatalisation, labialisation, pharyngealisation) as a sort of phonemes (say, /j/, /w/, /h/) — which will at once drastically reduce the number of basic consonants. Thus it is easy to see that a big number of consonants (be it 168 or 110) in itself is not a theoretical obstacle of any kind — it is just a problem of phonological interpretation.

I would also dismiss two other objections raised by Chirikba on p. 12:

a) "pharyngealisation and palatalisation are always in complementary distribution in any language where they occur within one phonological system". This is an old thesis belonging to N. S. Trubetzkoy [Trubetzkoy 1931] and explicable by his incomplete knowledge of Caucasian consonant systems at that time: see my comments to his paper [Старостин 1987: 465–466, 472]. We have, for example, the now well described Tsakhur language having both pharyngealisation and palatalisation coexisting within one system and quite independent from each other;

b) "the authors, as much as Abdokov, resort nearly exclusively to the method of external reconstruction, which strongly determines the shape of the whole of Proto-West Caucasian reconstruction". This is probably some misunderstanding on Chirikba's part: the whole CWC reconstruction presented in [NCED] was based solely on internal WC evidence, without any influence of Eastern Caucasian parallels. It is true, of course, that when internal WC data allow for several reconstructions in CWC, we choose the one that fits best into the particular North Caucasian reconstruction — but this is the usual practice of comparative linguistics. Chirikba maintains that "sometimes the internal analysis of a given word can present a more simple and economical explanation". This, of course, can be true in some particular cases, but the remark is rather general, and deserves a similarly general response: any internal reconstruction should be checked against external evidence (if such evidence exists), and from the scientific point of view the best situation is when internal and external evidence match. Also, the "more simple and economical explanation" unfortunately is not always the true one, which is well known to every comparative scholar.

Before I proceed with my arguments for every individual case of discrepancy between my system and that of Chirikba's, I must point out that the solution he proposes to do away with 58 excessive consonants in CWC is rather simple: Chirikba declares that pharyngealisation in Ubykh is secondary, and so is the opposition "lax-tense" in Adygh. Let us try to understand the author's arguments.

1. *Pharyngealisation*

Among WC languages, pharyngealisation is attested only in Ubykh. Chirikba abstains from projecting it to the CWC level for two reasons (p. 333):

a) "firstly because the reconstruction of pharyngealised consonants, added to the already reconstructed plain, palatalised, labialised and labialised-palatalised series, will lead to a substantial increase of the already huge consonantal inventory, which renders it typologically improbable". This is obviously an invalid argument. We cannot violate the system of correspondences just because we do not want the system to become too abundant: we must have a way to "explain away" the Ubykh pharyngealised consonants (e. g., demonstrating that they go back to some clusters, or arise out of some suprasegmental features etc.). The sheer desire to make the reconstructed system smaller is not enough: in a similar way we could do away, e. g., with the palatalised-labialised consonants, or, in fact, any other group or series of consonants;

b) "the correspondences of the Ubykh pharyngealised consonants to their counterparts in sister-languages do not form a special set, different from correspondences with Ubykh non-pharyngealised consonants". If this were true, this would be indeed a serious argument for dismissing the CWC pharyngealised consonants. Unfortunately, this is not true at all. Pharyngealisation was indeed lost without a trace in Abkhaz and Adygh in the case of labial consonants; but uvular pharyngealised consonants in most cases give different reflexes, compared with non-pharyngealised ones. All cases like that are declared by Chirikba to be "irregular" (see below), which is of course the easiest way. On page 333 he himself, however, lists several cases like that, in a rather informative passage:

"Though there are enough reasons to regard the pharyngealised consonants in Ubykh as an innovation, still their existence in Ubykh could in principle indicate their earlier presence as a feature of the vocalic system, which later disappeared in Proto-Circassian and Proto-Abkhaz, but shifted to the consonants in Proto-Ubykh". This means that Chirikba, in fact, acknowledges the reconstruction of pharyngealisation but prefers to treat it as a vocalic rather than a consonantal feature. This, again, is purely a matter of phonological interpretation. I have favoured the reconstruction of pharyngealised consonants because of the restricted distribution of pharyngealisation: it is present only in the labial and uvular local series, which is typical for systems with pharyngealised consonants and not vowels (in the latter case we would expect a wider distribution of pharyngealisation, not depending on the nature of neighbouring consonants) — see the discussion in [Старостин 1987].

2. *Opposition "Lax-Tense"*

Proto-Circassian had a whole set of tense stops and fricatives (*p, *t, *c, *ʃ etc.). Some of them regularly correspond to Abkhaz voiced consonants, others — to Abkhaz voiceless ones (for a complete account cf. [NCED] and below). For some reason (essentially — in order to diminish the number of phonemes in CWC) Chirikba dismisses the former type of correspondences as irregular but acknowledges only the second set, considering tenseness in Circassian to be always secondary. Even if we follow Chirikba and regard the correspondences "PC tense : PA voiced" as secondary, we are still left with the split of voiceless consonants into lax and tense in PC. Chirikba does not even attempt to give any positional conditions for this split and this solution is clearly unsatisfactory from a methodological point of view. On the other hand, the system of correspondences proposed in [NCED]

and presuming the archaic nature of Circassian tense consonants allows to regard a great amount of cases as quite regular, without any need for assuming any arbitrary splits.

Labial stops

The PWC stops **b*, **p*, **p̥* are in general reconstructed correctly. For **p*, however, the Circassian reflexes are given as *p*, *p̥*. The only example of PC **p̥* given, however, is PC **pa* 'to be out of breath': Ub. *pə* : Tap. *-pə* 'to grieve, be annoyed' (p. 180). Chirikba quotes [Kuipers 1975] with Bzhed. *pa-*, but gives also Ad. *zag^{wa}-pa-* 'to be angry'. These are, in fact, two distinct PC roots, the Bzhed. form for 'to be angry' being also *zag^{wa}-pa-* — see [Kuipers 1975: 10]. There is, therefore, not a single example of the development PWC **p̥* > PC *p̥*.

On the other hand, there are several cases of a (perfectly regular) correspondence "Abkh., Ub. *b* : PC *p̥*" [NCED: 180]. These are:

Abkh. **bana* 'wood', Ub. *baná* 'grass' : PC **paná* 'thorn' (assumed by Chirikba to be irregular, see p. 335);

Abkh. **barac^{wa}* 'medlar', Ub. *barac^v* : PC **para-žaja* 'sloe' (same remark);

Abkh. **saba* 'dust' : PC **sápa* (Ad. *sāpa* > Ub. *sāpa*);

Ub. *ba-ǵla* 'enemy' : PC **pə-ja* id.;

Abkh. **bat^{wa}* 'spring wool' : PC **pacá* id. (see below for the explanation of the inlaut correspondence).

Some specific cluster correspondences (also declared irregular on p. 337) are also easily explained if we assume the original nature of PC **p̥*, cf.:

Abkh. **pəśə-* 'fish' (assimilation < **pəśə-*), Ub. *psa* (similar assimilation) : PC **p̥ca* (progressive assimilation) < PWC **pəšV*;

Abkh. **-masa* 'eyebrow' (< **bāsa*), Ub. *-msa* (similar development) : PC **-p̥ca* (progressive assimilation) < PWC **pāsa*.

More cluster examples can be given, but the above, I think, is enough to show that the correspondence "Abkh., Ub. *b* : PC *p̥*" is regular, while the correspondence proposed by Chirikba ("Abkh., Ub. *p̥* : PC *p̥*") does not exist.

On p. 178 Chirikba says that he "does not find enough evidence which would indicate the presence of the labials' labialised, palatalised or labialised-palatalised correlates". As a matter of fact, there is some evidence in favour of those consonants — although not abundant (but there is scarcely any abundant evidence for any PWC phoneme, just because of their overall great number). What I mean is several cognates involving correspondences between Ub. *f* and labial stops in other languages, as well as a number of cognates involving correspondences of labial stops and dental labialised consonants or palatal affricates.

a) Labialised labials: labialised $*p^w$ and $*b^w$ can be reconstructed in several cases where Ubykh has the fricative f while Abkhaz has either $*p$ ($< *p^w$) or $*f$ ($< *b^w$) and PC has $*p$, $*b$. Cf.:

Ub. *fa-*, Abkh. $*p\partial-$: PC $*pa$ 'nose' $<$ PWC $*p^wV$;

Ub. *fə-mə-* 'to smell', Abkh. $*f\partial-\text{ɬ}^w\partial$ 'smell' : PC $*ba-má$ 'smell' $<$ PWC $*b^wV$;

Ub. *fawə-* 'to fight' : PC $*bana-$ id. $<$ PWC $*b^w\tilde{V}$.

All three examples seem phonetically and semantically quite reliable, and the development $*p^w, *b^w > f$ is easy to explain. I must note, however, that no tense ($*p^w$) or glottalised ($*p^w$) labialised labial stops can be reconstructed.

b) Palatalised labials: these do not exist in modern WC languages. There is, however, a peculiar set of correspondences where Abkhaz labials correspond to Ubykh labialised dentals and Circassian simple dentals. According to phonetic descriptions, Ubykh labialised dental stops were pronounced similarly to the same phonemes in Abkhaz, i. e. basically as dentals with stopped labialisation and pronounced palatalisation (i. e. $/d^b/$, $/t^p/$, $/t^p/$); in Abkhaz I have witnessed this articulation myself in several dialects. It is easy, therefore, to suppose a development like $*p > /t^p/$ ($= t^w$) etc. At the present time I see no other possible explanation of these rows of correspondences (one cannot reconstruct anything like $*t^w$ here — just because perfectly normal correspondences exist for $*t^w$, $*d^w$ etc.). The actual examples are:

Abkh. $-\dot{p}$ 'suffix of present / future tense in verbs' (probably $< *p\partial$ with secondary glottalisation in the specific auxiliary function at the end of verbal forms) : Ub. t^w- 'to be' : PC $*-tV-$ 'to be' $<$ PWC $*p\partial-$. [PC $*-tV-$ can reflect a merger of two different WC roots — $*p\partial-$ and $*t\partial-$ 'to be', the latter reflected also in Abkh. $*ta-$ and Ub. $-t\partial$; however, the Abkhaz-Ubykh parallel still points to PWC $*p$];

Abkh. $*pa$ 'to jump; to copulate (of animals)' : Ub. t^wa- id. $<$ PWC $*pa$;

Abkh. $*pa$ 'son; male' : Ub. t^wa- 'male' $<$ PWC $*pa$;

Abkh. $*ab\partial$ 'father' : Ub. $t^w\partial$: PC $*ata$ id. $<$ PWC $*(a)p\partial$. [Note that in this case again we have a (quite normal from my point of view) correspondence of a tense consonant in Circassian to a voiced consonant in Abkhaz, pointing to a tense stop in PWC];

Abkh. $*aj\partial-ba-$ 'reciprocal prefix' : Ub. $-d^wa$ 'distributive affix' : PC $*da-$ 'reciprocal, collective prefix' $<$ PWC $*ba$;

Abkh. $*baba$ 'soft, shaggy' : Ub. $d^wad^wá$ 'fluffy, downy' $<$ PWC $*bVba$;

Abkh. $*p\partial$ 'to dig making the ground light by crumbling it' : Ub. $t^w\partial-$ 'to dig' : PC $*ta-$ id. $<$ PWC $*p\partial$ [Chirikba, p. 182, compares the Abkh. form with

PC **wə-pə-čkʷə-* 'crush, rumple', Ub. *ǵə-pə-* 'torment, torture' — which, I think, is less convincing].

Some of these examples may be disputed, but the general pattern is quite consistent, and I cannot agree with Chirikba (p. 189) who just declares this to be an "irregular correspondence".

c) Palatalised labialised labials: there are several cognates where Chirikba (pp. 186, 189) reconstructs dental palatalised labialised stops (**dʷa* 'to sew', **dʷa-dʷə* 'awl', **tʷa* 'cherry'). These are the rows of correspondences where I [NCED: 181] reconstruct PWC labial palatalised labialised **bʷ*, **pʷ* (there are also a few forms where **pʷ* can be reconstructed, but they are more dubious). There are actually two reasons for such a reconstruction in [NCED]:

— there exists another group of examples (ignored by Chirikba), where Abkhaz and Ubykh labialised dental stops correspond to Circassian affricates and where I reconstruct PWC dental palatalised labialised stops, cf.:

Ub. *tʷa-* 'pus, suppurate' : Kab. *çə-na* 'pus' < PWC **tʷV*;

Ub. *mʲtʷa* (with a variant *mʲpa*) 'lead' : PC **pca-* : Abkh. **pəʦə-sa* (with dissimilation < **pəʦʷə-sa*), cf. Abzh., Tap. *á-ʦsa*, Bzyp *á-psta* < PWC **pəʦʷV* (note the regular progressive assimilation in Circassian: **pəʦʷV* > **pca* > **pca*);

PC **pacá* 'spring wool' : Abkh. **batʷa* id. < PWC **pVtʷa*;

— theoretically both groups of examples can be interpreted on WC ground either as dental or labial stops; both groups certainly point both to labialisation and palatalisation in PWC. However, in the first group the root **bʷa* (Chirikba's **dʷa*) corresponds to PEC **=irbV* 'to sew' [NCED: 648-649], while in the second one PWC **pVtʷa* seems to correspond to PEC **pədwV* / **bətʷV* 'feather, down' [NCED: 874].

This is exactly one of the cases where external evidence helps to solve otherwise obscure internal WC problems, pointing to the probability of reconstructing labial (palatalised labialised) consonants in the first group and dental (palatalised labialised) consonants in the second one.

Of course, timbred labials were rare in PWC; still, the examples presented above seem to fill an empty slot in the system and reduce the number of irregularly corresponding cognates. It is interesting to note that timbred labial stops occur only in monosyllabic (or reduplicated) roots: this probably means that in polysyllabic roots phonetically peculiar palatalised / labialised labials had been lost earlier, even before the split of Common West Caucasian.

Dental stops

For PWC $*t$, $*d$, $*t̥$, $*t^w$, $*d^w$, $*t̥^w$ the reconstruction presented in [NCED] and in Chirikba's book is generally the same. Again, however, Chirikba proposes a secondary split $*t > \text{PC } *t$, $*t̥$; $*t^w > \text{PC } *t$, $*t̥$. The examples he lists for PC $*t̥ < *t$, $*t^w$ are:

- 1) PC $*ma(r)t̥a$ 'quantity, measure' : Abkh. $*mata$ 'a strip of land which has to be ploughed or hoed';
- 2) PC $*ataqa$ 'cock, rooster' : Ub. $taqa$ id.;
- 3) PC $*s^wt̥a$ 'to hurl' : Abkh. $*swata$ 'to overturn; to rush';
- 4) PC $*wə-t̥a$ 'to pound, thresh' : Ub. $t^wāt^wa$ 'green woodpecker', $t^wat^wa-wə$ 'arms, weapons', Abkh. $*t^wat^wa$ 'to husk the grain out of ears';
- 5) PC $*pśa-t̥aqa$ 'back of neck, occiput' : Ub. $t^wəq$ 'neck'

While the first example is rather dubious semantically, the others are fine. Note, however, that:

a) PC $*s^wt̥a$ 'to hurl' [Kuipers 1975: 16] is reflected only in Shapsug and Beslenej and can be in fact reconstructed as $*s^wt̥a-$ (Shapsug $jə-s^wt̥a-$, Beslenej $jə-ft̥a-$; no forms with a reflex of $*t̥$ are present);

b) in № 4 a better Abkh. match seems to be $*d^wad^wə-$ 'to grind roughly' (Chirikba compares it with Ub. d^wad^wa- 'fluffy', but for the latter an obvious Abkhaz match is $*baba$ 'soft, shaggy', see above);

c) in № 5 a very good (although metathesised) Abkh. match is $*q^wada$ 'neck' with a voiced $*d$.

We, therefore, arrive at a very clear system of correspondences:

PWC $*t̥ > \text{Abkh. } *d$, Ub. t , PC $*t̥$ [unfortunately, in [NCED: 181] there is a misprint and the Ubykh reflex is listed as d — although in the body of the dictionary the correspondence is as stated, cf. $*dV̄GwV$ 'cock' etc.];

PWC $*t^w > \text{Abkh. } *d^w$, Ub. t^w , PC $*t̥$.

Here, just as in the system for labials, there seems to be enough grounds for reconstructing the separate tense dental stops $*t̥$, $*t̥^w$. Note that they behave just like $*p$ in Abkh. and Circassian, but yield voiceless reflexes in Ubykh (the same is true for palatalised $*p̥$: in the root for 'father', see above).

Velar stops

In general, the reconstruction presented by Chirikba coincides with the one presented in [NCED]. This is true for most reconstructed velars: $*g$, $*g̊$, $*g^w$, $*g̊^w$, $*k$, $*k̊$, $*k^w$, $*k̊^w$. But again, tense $*k̊$ in PC stays unaccounted for. Chirikba here, as in other cases, considers PC $*k̊$ to be a secondary development of $*k$, postulating:

a) PWC *k > PC *k / *k̥

Here the only example of PC *k̥ is a very dubious match between Abkh. *kada 'side' and PC *kápa (where -d- and -p- are absolutely unclear);

b) PWC *kʷ > PC *kʷ / *k̥ʷ

The only examples of *k̥ʷ here are PC *k̥ʷásá 'cradle' : Abkh. *kʷásá-kʷásá 'to mince, go at a jog-trot' (?) and PC *k̥ʷarV-k̥ʷarV 'call for turkeys' : Abkh. *kʷarə-kʷarə 'to neigh' (?). I will not comment upon the validity of those examples.

No examples of *k̥ > PC *k̥ or *k̥ʷ > PC *k̥ʷ are given at all.

As a matter of fact, PC *k̥ is a very rare phoneme (only seven examples in [Kuipers 1975]), and I indeed do not know any secure examples for PWC *k̥, *k̥ or *k̥ʷ. One word with *k̥ (PC *kat̥á 'hen') has a good parallel in Abkh. *kʷat̥ə, but this root most certainly underwent assimilations: the PWC form must be reconstructed as *k̥ʷVt̥ə // *k̥Vt̥ʷə (with *k̥ʷVt̥ə > *kʷat̥ə in Abkh. and *k̥Vt̥ʷə > *kat̥ʷə > *kat̥ə in PC; cf. [NCED 444: PNC *gwāta]). Two words with *k̥ in PC (*kapá 'side' and *ká-jə 'gullet') have parallels in Eastern Caucasian [NCED: 292, 431], but unfortunately lack closer parallels in Western Caucasian. It seems that PWC *k̥ and *k̥ʷ were rare, just as their reflexes in PC.

However, we have rather good evidence for PWC *kʷ. Consider the following examples:

PC *kʷárta 'flock of sheep' : Abkh. *gʷarəta id.;

PC *kʷápə 'group' : Abkh. *gʷəpə id.;

PC *-kʷa 'a privative or pejorative suffix' (in *ca-kʷá 'blunt', lit. 'toothless' or 'with bad teeth', *bza-kʷá 'dumb', lit. 'tongueless' or 'with bad tongue') : Abkh. *-gʷV id. (in *ca-gʷV 'blunt', *ká-gʷV // *kat̥a-gʷV 'short-tailed') : Ub. gʷə, agʷə 'small'.

Chirikba does not cite the third example (present in literature, see the discussion in [Шарипов 1977: I, 163]), and regards the first two examples as 'not very reliable from the point of view of their genuine character' (pp. 335–336). This seems rather strange to me, because the quality of these examples seems to be certainly better than the obviously onomatopoeic matches for *kʷásá and *kʷarə-kʷarə or the obscure match between *kápa and *kada presented above.

The velar series, therefore, also demonstrates the consistent pattern of Abkhaz voiced consonants corresponding to Adyghe tense ones, seen throughout the whole system of stops.

Uvular stops

A preliminary note: I would rather speak of uvular affricates, not stops. Uvular consonants (with the possible exception of voiced *g* and tense *q*) are usually articulated as affricates in most Caucasian languages, not excluding Western Caucasian.

The reconstruction of uvular stops in [Chirikba: 208–222] is quite different from the system presented in [NCED], and I must dwell on it in some detail. The basic reason for the different interpretation is the fact that Chirikba does not want to acknowledge the genuine nature of Ubykh pharyngealisation and is therefore forced to suppose numerous unmotivated splits in the development of individual phonemes.

I shall start here with the system presented in [NCED] for plain uvulars:

PWC **q* > Abkh. **h*, Ub. *q*, PC **q*

PWC **q̣* > Abkh. **q*, Ub. *q*, PC **q̣*

PWC **q* is a rare phoneme, reflected in:

PWC **qa* > Ub. *qa*, PC **qa* 'grave', Abkh. **ha-pə* 'cave';

PWC **qa* > Ub. **qa* 'little pimples; chaps', PC **qa-(m)pa* 'dandruff', perhaps also Bzyp *á-ha-mp* 'layer of fern under the reed roof'.

Chirikba lists both examples (p. 210) without their Abkhaz counterparts, but adds also several cases with PC **q̣* (considering it to be, as usual, a secondary development):

Ub. *taqa* : PC **ataqa* 'rooster'; Ub. *qə* : PC **qə* 'to be benumbed'; Ub. *tʷəq* : PC **təqə* 'neck' [I would also add Abkh. **qʷəda* 'neck', see above]; PC **wə-qə* 'to distend' : Abkh. **qa* 'to pull'. One final example is Ub. *žʷaqa* 'late' : Abkh. **aqa* 'night' (without a Circassian parallel).

I can also add the following example: PC **qə* 'big' [Kuipers 1975: 64] : Abkh. **qa* 'enough, be enough'.

From the above examples it seems quite obvious that:

a) Abkh. **q* does not correspond to PC **q* — there is no single example of such a match;

b) whenever PC has **q̣*, Abkhaz has **q*, and in the few matching cases where PC has **q*, Abkhaz has **h*.

It seems quite evident to me that Chirikba (with his dislike for tense consonants) is confusing two rows of correspondences here:

a) **q* > Abkh. **h*, Ub. *q*, PC *q*

b) **q̣* > Abkh. **q*, Ub. *q*, PC **q̣*

Here, as well as in most other affricate series, PWC tense consonants yield Abkhaz and Ubykh voiceless reflexes, as opposed to the system of stops.

PWC *G > Abkh. *ɣ, Ub. ɣ, PC *ɣ

This is a row of correspondences which is very numerous and, of course, acknowledged by Chirikba. However, he reconstructs here a fricative *ɣ, not a stop or affricate (see pp. 281-282).

The reasons why I have reconstructed a stop (affricate) even though all the daughter languages have fricatives are the following:

a) phonetically G is a rather rare and unstable phoneme in most Caucasian languages and it tends to become fricativised very easily;

b) I reconstruct a PWC *ɣ for the following row of correspondences: Abkh. *ɣ : Ubykh ɣ, PC *ɣ. This row of correspondences is also present in Chirikba's book (pp. 289-290), but is treated here as PWC *ɣ.

The natural objection against reconstructing *ɣ for Abkh. *ɣ : Ubykh ɣ : PC *ɣ is the fact that in no language I know do the pharyngeals [from the phonetic point of view I would avoid the term "pharyngeals" and speak, after S. Kodzasov, about emphatic laryngeals] ever yield uvular fricatives — whereas the opposite development (from *ɣ to ɣ or from *χ to ɣ) is attested quite abundantly.

The most obvious reconstruction for the two discussed rows of correspondences thus would look like:

*ɣ > Abkh. ɣ, Ub. ɣ, PC *ɣ;

*G > Abkh. ɣ, Ub. ɣ, PC *ɣ.

We see that *ɣ and *G have merged in PC and Ubykh (which is, as I said, quite a normal phenomenon), but are kept distinct in Abkhaz — also with a perfectly well explainable shift *ɣ > ɣ followed by *G > *ɣ (= ɣ). Note that the notation *ɣ for Proto-Abkhaz actually means a uvular *ɣ, because the opposition of velar *ɣ and uvular *ɣ is lacking both in Common Abkhaz and in all modern dialects.

PWC *q > Abkh. *q, Ub. q, PC *q

This row of correspondences is observed in the following items:

PWC *qa- 'affix in colour designations' > Abkh. *qa- in *qa-pəšə 'red';

Ub. -qa in ɣla-qa 'blue, green' : PC *qa- in *qa-šχ^{wa} 'blue, green';

PWC **qa-* 'blunt' > Abkh. **qa-g^{wa}*, PC **qa-* 'be blunt, benumbed';

PWC **qV-* 'cut' > Abkh. **qV-*, Ub. *qə-*. Chirikba (following Abdokov) compares also PC **wə-ʔa-* 'to wound', but I would rather compare a semantically closer PC **qa-má* 'dagger' (= 'cutting tool', formed like **wə-má* 'big wooden hammer' = 'striking tool' with the instrumental suffix *-*ma* and widely borrowed into neighbour languages). For some reason Chirikba lists the same root under № 2 and № 10;

PWC **qV-* > Abkh. **qə-* 'to damn', **qa-t^{wa}*- 'to inflict damage', Ub. *La-qa* 'damage, evil' [Chirikba: 217];

PWC **pqV-* > Abkh. **pqə-ʒə*, **pqə-šə* 'reed', Ub. *pqa-čə* 'reed' (ibid.)

Chirikba (pp. 208, 217) has instead two different correspondences:

a) Abkh. **ʕ* : Ub. *q*, *qI* : PC **q* < PWC **G*

Only three examples are given, and they are, in fact, heterogeneous:

Ub. *wa(n)qə* 'goat' : PC **waqəjə* 'interjection for driving away calf or cow' is rather dubious semantically, but even if true, fits well the correspondence formulated above (Abkh. **q* : Ub. *q* : PC **q*);

Ub. *qIə-* : Abkh. **cə-ħa-* : PC **ca-qa-* 'to bite' is in fact a different correspondence (with -*ħ-* rather than **ʕ* in Abkhaz), in which I reconstruct, of course, a pharyngealised **qI* (see below). In an expressive reduplicated version of this root we have Ub. *qIəqIə-*, but Abkh. — with loss of pharyngealisation — **qəqə-* 'to gnaw, crush with teeth'.

The only example of Abkh. **ʕ* corresponding to PC **q-* is Abkh. **ʕa-*, PC **qa-* 'hither' — which is a good semantic and phonetic match for which I reconstruct PWC **qIa-*.

We see that the correspondence, in fact, is falling apart, but instead we can observe a promising connection of Ubykh pharyngealisation with Abkhaz emphatic laryngeals (*ħ*, *ʕ*); see below for more on that.

b) Abkh. **q* : Ub. *q*, *qI* : PC **ʔ* (Kuipers and Chirikba denote it as **q*) < PWC **q*

Above (p. 683) I have already discussed Chirikba's refusal to reconstruct phonologically distinct **q* and **ʔ* for Common Abkhaz. Here, I believe, it is exactly this refusal that has served him a bad favour.

If we analyse the examples present on pp. 217-218 we shall easily see that most of the cases presented as the correspondence "PC **ʔ* : Abkh. **q*" are actually cases of the correspondence "PC **ʔ* : Abkh. **ʔ*". Cf.: PC **ʔa-*

(Chirikba: **qa-*) : Ub. *qa-* : Abkh. **ʔa-* 'to be, exist' (see above); PC **ʔa-* 'locative preverb' : Ub. *qa* 'place' : Abkh. **-ʔa* 'directional suffix' (see above); PC **gʷa-ʔa-* 'to worry, be anxious' : Ub. (*ǵa*)*q̇a-* 'love, like' : Abkh. **gʷa-ʔa-* 'to worry, care' (Abkh. *-gʷa-q̇-*, Ashkh. *gʷa-q̇-*, Tap., with assimilative labialisation, **gʷa-ʔa-* > *gʷaʃw-*).

For the correspondence Abkh. **ʔ* : Ub. *q̇* I can also add: Ub. *šʷaǵá* : Abkh. **šʷaʔV* 'letter, document' (see above and [NCED: 976]).

Here, therefore, we have a clearly defined correspondence:

Abkh. **ʔ* : Ub. *q̇* : PC **ʔ*

The presence of an emphatic laryngeal in Abkhaz here again suggests original pharyngealisation — this time, lost in Ubykh, but having preserved some traces (phonetically both Abkh. *ʔ* — still preserved in Tapanta — and Circassian *ʔ* are certainly pharyngealised). The exact reconstruction here is somewhat complicated: since Ubykh normally preserves pharyngealisation, the natural question is — why has it been lost in this case?

From synchronic descriptions of languages possessing pharyngealisation (such as Rutul, Tabasaran, Archi etc.) we know that pharyngealised and non-pharyngealised uvulars tend to be neutralised in a palatalised position (usually — before front vowels). In some dialects the resulting forms are pharyngealised, whereas in others they lose pharyngealisation. My hypothesis, therefore, was that the factor that could have brought about the loss of pharyngealisation in Ubykh could have been palatalisation.

This is how we arrive at the solution presented in [NCED] — i. e. to reconstruct a set of PWC palatalised pharyngealised consonants. In the actual case one could reconstruct something like PWC **q̇I*. There is, however, also a small set of examples where PC **ʔ* and Ubykh *q̇* correspond to Abkh. **ʃ* (more rarely, **h*):

PC **ʔa-ʃwV* 'sweet' : Ub. *qa-q̇a* : Abkh. **qa-ʃa* id.; PC **ʔa-* (Kab. *ʒa-ʔa-*) 'speak', **gʷaʃa-qa* 'word, speech' : Ub. *qa* 'speech, to speak'. Chirikba (p. 217) compares Abkh. **qa-ʃa* 'to shout, speak very loudly', comparing the first part with PC and Ub. — but in fact it is the second part that should be compared: cf. without the element *qa-* Tap. *aʃa-* 'to hear', as well as the voiceless variant **ha* 'to hear, reach (of sound)' (Abkh. *-ha-*, Tap. *ha-*, *ʃa-ha-*).

In [NCED] I have reconstructed **q̇I* for the latter set of correspondences, which left just only possibility for the row Abkh. **ʔ* : Ub. *q̇* : PC **ʔ*, namely PWC **q̇I*. As a matter of fact, I am not quite sure in which cases **q̇I* should be reconstructed and in which ones — **q̇I* (external evidence does not help very much either — although the parallel for **q̇Ia* 'sweet' — EC **q̇ehlV*

'bitter' — suggests *q̣l rather than *q̣l̥, but I am reasonably sure that we must reconstruct palatalised pharyngealised uvular affricates for both rows.

We see, therefore, that the elegant correspondence *q̣ : q̣ : *q̣ proposed by Chirikba does not in fact exist. In addition to all the examples discussed above, the list also contains:

PC *ʔa, Ub. qa-pa 'hand, arm' : Abkh. *qaça- 'do, make' — a semantically dubious example;

PC *-ʔa in *psa-ʔa 'wet', *čə-ʔa 'cold' (Chirikba also adds *gʷə-ʔa- 'to worry, care' which has nothing to do with the preceding two words; see above), Ub. -qə in qa-qə 'sweet' (on qa- see above), ʃə-q- 'to salt' : Abkh. *qə 'to ram, press, squeeze' (?).

In both cases the PC and Ubykh forms fit each other very well, but the Abkhaz matches are very dubious.

Palatalised uvulars

PWC *q̣ > PC ?, Ub. q̣, Abkh. ɣ̣

This correspondence, observed in one item (Ub. -q̣a 'tip, little part' : Abkh. *-ɣ̣a id.), seems probable, and I am quite willing to add it to my system of correspondences (in [NCED] the phoneme *q̣ is not reconstructed). The other example given by Chirikba, however, seems to me more dubious: I would rather compare Ub. q̣a 'horn' not with Abkh. -ɣ̣a in á-čv-ɣ̣a 'horn for wine' (where -ɣ̣a is most probably the same as the preceding root), but with Abkh. *-ɣ̣wa in *tʷə-ɣ̣wa 'horn', PC *-q̣wa in *bʒa-q̣wa 'horn', reconstructing PWC *q̣wa [NCED: 903].

The third and last example, given by Chirikba, actually demonstrates a different correspondence: Ub. q̣ : Abkh. *q (Ub. maq̣á 'bosom' : Abkh. *maqa 'shoulder with forearm'), for which I reconstruct PWC *q̣ because it is perfectly parallel to the correspondence Ub. q̣ : Abkh. *q < PWC *q̣ (see above); unfortunately, the root has no Circassian matches. Chirikba, with his unwillingness to reconstruct tense consonants in PWC, is once again forced to confuse two different correspondences.

PWC *ǵ > PC *ɣ, Ub. ɣ̣, Abkh. ɣ̣

This correspondence is present in Chirikba's book (pp. 283-284); moreover, the author has found the Circassian reflex (*ɣ), absent in my chart [NCED: 183], and observable in PC *kačə 'milk products' (: Ub. čaḱa, Abkh. *čaḱa) and PC *žə-bka 'strong wind' (: Abkh. *bɣə-ɣa 'swift; brave'). However, here, too (as in the case with *G) Chirikba reconstructs *ɣ̣ (in his notation — *ɣ̣̣),

because in the row "PC **ɛ* : Ub. *ɛ* : Abkh. **ɛ*" he reconstructs a palatalised **ɛ*' (p. 291).

I have already written above about the implausibility of the change **ɛ* > *ɛ*; the change **ɛ*' > *ɛ* is no less implausible — in fact, implausible is the very supposition of the distinction **ɛ* — **ɛ*' (as well as **h* — **h*', see below). I am not aware of a single language with the opposition of palatalised / non-palatalised emphatic laryngeals (pharyngeals). So here again I prefer to reconstruct:

PWC **ɛ*' > PC **ɛ*, Ub. *ɛ*, Abkh. **ɛ*

PWC **ɛ*' > PC **ɛ*, Ub. *ɛ*, Abkh. **ɛ*

As for the phoneme **ɛ*', reconstructed by Chirikba (p. 209), it is based only on one rather dubious example (PC **-qa* 'affirmative suffix' : Abkh. **ɛ*^w*a-ka* 'precisely, exactly') and the author himself states that the reconstruction "is not based on reliable material and thus remains tentative".

PWC **ɛ*' > PC **ɛ* (Chirikba's notation — **ɛ*'), Ub. *ɛ*, Abkh. **ɛ*

This is the same correspondence (for once!) as in [Chirikba: 219]. A minor difference consists in Chirikba's adding a parallel reflex *ɛ*^w in Ubykh (due to the author's conviction about the secondary nature of Ubykh pharyngealisation), which is present only in one example (Ub. *ɛ*^w*laLa* 'turbulent, noisy (as child or animal)' : Abkh. **ɛ*^w*ala* 'vagrant, stray, tramp'; I think that both Ub. and Abkh. are actually borrowed from PC **ɛ*^w*a-La* 'wild', the opposite of **ɛ*^w*a-sa* 'tame'), and can be safely dismissed.

Labialised uvulars

PWC **q*^w > PC **q*^w-, *q*^w, Ub. *q*^w, -*χ*^w-, Abkh. **h*^w

This correspondence is observed in:

PC **tharəq^wa* : Ub. *daχ^wá* : Abkh. **la^wha* 'rook, raven' (considered by Chirikba, p. 216 to be irregular);

PC **ha-q^wa* 'trough', **q^wa-s^wa* 'boat' : Abkh. **ja^wha* 'trough' (this parallel is placed by Chirikba under his PWC **G^w*, see p. 209, although it does not really fit into his system, see below);

Ub. *q^wəna* 'mouse' : Abkh. **h^wəna-pə* id.;

Ub. *pqə* 'fruit' (with dissimilation < **pq^wə*) : Abkh. **pə^wha* 'plum' ([NCED: 873]; the PC parallel here has an irregular fricative — PC **pχa*- / **pχ^wa*- 'fruit', probably due to being part of a consonant cluster).

Despite scarcity of evidence (PWC $*q^w$ is a rather rare phoneme, just like $*q$), the general behaviour of the affricate is here the same: Abkhaz demonstrates fricativisation ($*q^w > h^w$) while Ubykh and Circassian preserve (with some positional exceptions) the affricate. The tenseness of $*q^w$ in PC here is not surprising: in PC $*q$ and $*q^w$ occur almost exclusively in the initial position ([Kuipers 1975] lists some words with intervocal $*q$, $*q^w$, but none of them have any external parallels), while $*q$ and $*q^w$ are abundant in all positions; we may suggest that in PC medial $*q^{(w)}$ and $*q^{(w)}$ were neutralised.

In Chirikba, p. 213 we observe a correspondence with three unexplainable "commas": PWC $*q^w > PC *q^w$, $*q^w$, Ub. q^w , qI^w , qI , Abkh. $*q^w$. Let us look at the material closer.

The vast majority of examples actually pertain to the phoneme that was reconstructed in [NCED] as $*q^w$ and gives the following reflexes: PC $*q^w$, Ub. q^w , Abkh. $*q^w$ (cf. PWC $*q > PC *q$, Ub. q , Abkh. $*q$, see above). The examples are as follows:

- PC $*\lambda a-q^w a$ 'leg, foot' : Abkh. $*\check{s}a-q^w a$ 'heel';
- PC $*q^w a$ 'thrash, beat' : Abkh. $*q^w a-q^w a$ id.;
- PC $*q^w a$ 'fill up, compress' : Abkh. $*q^w a$ 'to press, felt';
- PC $*q^w a$ 'prop up, support' : Abkh. $*q^w a$ 'to help, support';
- PC $*q^w a$ 'body' (in compounds) : Abkh. $*q^w a$ id.;
- PC $*p\chi a-q^w a$ 'torch' : Ub. $m\check{z}a-q^w a$ 'moonlight' : Abkh. $*s^w a-q^w a$ 'ray, beam';
- PC $*q^w a m a$: Abkh. $*m a q^w a$ 'twig';
- PC $*q^w a$: Ub. $q^w a$ 'son';
- PC $*q^w a$: Ub. $q^w a$ 'valley';
- PC $*\check{s}a q^w a$ 'vessels' : Abkh. $*a\check{s}a q^w a$ 'boat'.

Circassian $*q^w$ is present here only in one rather dubious example: PC $*q^w a-j a$ 'cheese' : Abkh. $*q^w a r a t a$ 'basket for keeping cheese'. The Abkh. word actually means 'basket for keeping food' and is phonetically and semantically closest to PC $*p\chi^w a n t a$ 'box, basket' (see the discussion in [Шагирова 1977: II, 25]); here $*p\chi^w$ in PC could be a secondary development from $*p q^w$ (just as in $*p\chi a$, $*p\chi^w a$ 'fruit', see above), thus allowing to reconstruct PWC $*p q^w a r a t a \sim *p q^w a n a t a$.

Ub. pharyngealised $qI^{(w)}$ is present in two examples: a) Ub. $qI^w a$ 'to bark' : PC $*h a-q^w a$ id., $*q^w a-k a$ 'to howl' : Abkh. $*q^w a-\check{s} a$ 'to howl' (= PC $*q^w a-k a$). Ub. $qI^w a$ is usually used together with $wI a$ 'dog', and here pharyngealisation may indeed be secondary; b) Ub. $qI a L a$ 'jackdaw' : PC $*q^w a L a$ id. Cf. also Ub. $qI a-\check{s} a$ 'village' : PC $*q^w a-\check{z} a$ id.

In the last two examples there are no Abkhaz matches, but there exists at least one example in which Ubykh qI corresponds to Abkhaz $*\check{s}^w$: Ub. $qI a$ 'to run' : Abkh. $*\check{s}^w a$ id.

We can, therefore, rather safely reconstruct PWC $*qI^w > PC *q^w$: Ub. qI (note the peculiar absence of labialisation) : Abkh. $*\text{ɣ}^w$ (for $*qI > PC *q$, Abkh. $*\text{ɣ}$ see above).

Other good examples of this correspondence are:

PC $*tq^wa$ 'crocodile' : Abkh. $*t\text{ə}\text{ɣ}^wa$ 'legendary monster devouring the moon or the sun';

PC $*pq\text{ə}$ 'carcass, skeleton' ($< *pq^wa$ by dissimilation) : Abkh. $*bV\text{ɣ}^w\text{ə}$ 'bone'.

The latter two examples are for some reason thought by Chirikba to reflect his PWC $*G^w$ — which otherwise gives quite different reflexes (PC $*ʒ^w$, Ub. q^w , Abkh. $*\text{ɣ}^w$) and corresponds to my $*qI^w$.

PWC $*G^w > PC *k^w$, Ub. k^w , Abkh. $*\gamma^w$

The story here is quite similar to $*G$ and $*\acute{G}$. Chirikba acknowledges the correspondence, but reconstructs $*k^w$ (p. 284), whereas instead of my $*k^w$ (for the correspondence PC $*k^w$: Ub. k^w : Abkh. $*\text{ɣ}^w$) he reconstructs $*\text{ɣ}^w$ (p. 291–293). I shall not repeat my argumentation here.

PWC $*q^w > PC *q^w$, Ub. q^w , Abkh. $*q^w$

This correspondence (completely parallel to $*q$, see above) is observed in:

PC $*q^w\text{ərtə}$ 'brood-hen' : Ub. $q^w\text{art}$ id. : Abkh. $*q^w\text{arətə}$ id.;

PC $*q^wa-(n)\acute{c}a$ 'crooked' : Ub. $q^wa-(rta)-$ 'bend' : Abkh. $*q^w\text{ə}$ id.;

PC $*q^w\text{ə} / *q^wa-$ 'branch, shoot' : Ub. $ra-q^w\acute{a}$ id. : Tap. $q^w\text{ə}-ra$ 'dry grass';

Ub. $q^wa\acute{c}a-$ 'rumple, rub, crumple' : Abkh. $*q^w\text{ə}\acute{c}a-$ id.;

Ub. $\text{ca}q^w$ 'manure' : Tap. $q^w\text{ə}\text{c}$ id.;

Ub. $\acute{c}a\text{q}^w\text{ə}$ 'basin' (mistakenly recorded with pharyngealisation by Dumézil; Vogt's recording shows no trace of it) : Abkh. $*\acute{c}a\text{q}^w\text{ə}$ 'big wooden mug'.

Chirikba rejects this correspondence and presumes the regular Circasian correspondence for Ub. q^w , Abkh. q^w to be $*ʒ^w$ ($*q^w$ in his notation). Let us try to critically analyse his lexical evidence:

[2] Abkh. $*q^waq^wa$ 'cut, cleave' hardly corresponds to PC $*ʒ^wa$ 'thresh', Ub. q^wa 'trample down, press'; a much better match is Abkhaz $*\text{ɣ}^w\text{ə}-$ 'to shake, beat up' (on the correspondence PC $*ʒ^w$: Ub. q^w : Abkh. $*\text{ɣ}^w$ see below);

[3] $-ʒ^w\text{ə}$ in PC $*\text{c}^wa-ʒ^w\text{ə}$ 'sour' does not correspond to Abkh. $*q^w\text{ə}-ja-$ 'to steam body or its parts' etc.: the PC form is a good match for Ub. $ʒ^waq^w\text{ə}$ and Tap. $\acute{c}^w\text{q}^a$ 'sour' (where the second consonant corresponds rather irregularly:

it probably goes back to $*q^{(w)}$ with various assimilations and dissimilations, see the discussion in [NCED: 521]);

[4] PC $*\dot{z}^wa-\acute{s}ha$ 'barrow, hill' corresponds to Abkh. $*\dot{q}^wa-ra$ 'coast, shore' (cf. [NCED: 939]), but Ub. $\acute{s}a-\dot{q}^wa$ 'upwards' does not belong here (being a good match for PC $*-\dot{z}^wa$ 'upper part' — for some obscure reason compared in № 8 with Abkh. $*\dot{q}^wa-$ 'bend', see above);

[5] the match between PC $*\dot{z}^wa$ 'pen, fold', Ub. $\acute{g}a-\dot{q}^wa-$ 'to close' and Bzyp $a-3aj\chi a-\dot{q}^wa$ 'spring fenced by stones' seems very dubious phonetically and morphologically (the latter form perhaps belongs rather to the previous etymology — or else, quite independently, should be compared with Ub. \dot{q}^wa-da 'stone trough' — for some obscure reason compared by Chirikba in № 11 with Abkh. $*\dot{q}^wada$ 'coagulated blood');

[7] Ub. $\dot{q}l^wa$ 'cave, ravine' should not be compared with Abkh. $*-\dot{q}^wa$ 'bow' (in $*c^wa-\dot{q}^wa$ 'rainbow'); it corresponds rather well to PC $*q^wa$ 'ravine' (which itself was borrowed into Ub. q^wa id.)

On the whole, if we eliminate dubious comparisons, we are left with the following material:

[1] PC $*\dot{z}^wa$ 'mouth' : Abkh. $*\dot{q}^wa-$ 'preverb (*from the mouth)';

[2] PC $*\dot{z}^wa$ 'thresh' : Ub. \dot{q}^wa- 'trample down, press' : Abkh. $*\dot{\zeta}^wa-$ 'to shake, beat up';

[3] PC $*\dot{z}^wa-$ 'barrow, hill' : Abkh. $*\dot{q}^wa-ra$ 'coast, shore';

[4] PC $*-\dot{z}^wa$ 'upper part' : Ub. $\acute{s}a-\dot{q}^wa$ 'upwards';

[5] Ub. $\dot{q}l^wa$ 'cave, ravine' : PC $*q^wa$;

[6] Ub. $\dot{q}l^wa\dot{q}l^w-$, Abkh. $*\dot{q}^wa\dot{q}^wa-$ 'to huddle oneself, to squat'.

Now the picture becomes somewhat clearer. Ubykh $\dot{q}l^w$ certainly corresponds to PC $*q^w$ (not $*\dot{z}^w$!). The Abkhaz correspondence here is less clear. We have $*\dot{q}^w$ in $*\dot{q}^wa\dot{q}^wa-$ 'to huddle oneself, squat', but this is an expressive reduplication with possible irregularities. On the other hand, there are two other etymologies (only the first of them is discussed by Chirikba, p. 216, but considered to be an "irregular correspondence"):

Ub. $\dot{q}l^wa$ 'hair' : PC $*q^wa-j\acute{a}$ 'bald, hairless' ($-j\acute{a}$ is a privative / pejorative suffix) : Abkh. $*q^wa$ 'hair';

Ub. $\dot{q}l^wa-$ 'bend' : Abkh. $*q^wa-$ 'bend' (note that $\dot{q}l^wa\dot{q}l^w-$ can actually represent the same root; in Abkhaz, besides $*\dot{q}^wa\dot{q}^wa-$, we also have $*q^waq^wa$ 'crooked').

Thus, here again we have a special row of correspondences where Ubykh has pharyngealisation, which allows us to safely reconstruct PWC $*\dot{q}l^w > \text{Ub. } \dot{q}l^w, \text{ PC } *q^w, \text{ Abkh. } *q^w$ (with \dot{q}^w as an expressive variant).

In the above examples PC $*\dot{z}^w$ corresponds to Ub. \dot{q}^w and (once) to Abkh. $*\dot{\zeta}^w$. Other examples can be added, notably:

PC *tʔ^wə 'two' : Ub. tq^wa : Abkh. *ʔ^wə id.;

PC *da-ʔ^wa- 'hear' : Ub. La-q^wə- : Abkh. *ʒə-rə-ʔ^wə- id.

By analogy with *q̣l (PC *ʔ : Ub. q̣ : Abkh. *ʔ, see above) we can safely reconstruct *q̣l^w in all these cases. Chirikba (p. 209) acknowledges this correspondence, but reconstructs here a voiced *G^w (cf. the discussion of his non-labialised *G above). However, he adds three absolutely different examples that allow him to split the Circassian reflex into three — not just *ʔ^w, but also *q^w and *q̣^w — without any motivation! The two examples with *q̣^w are PC *tq^wa 'crocodile' — Abkh. *təʔ^wa 'monster devouring the moon or the sun' and PC *pqə (< *pq^wə) 'carcass, skeleton' — Abkh. *bVʔ^wə 'bone' that were discussed above and in my system are reconstructed with *q̣l^w; the one example with *q^w is PC *haq^wa 'water-trough for cattle' — Abkh. *jah^wa 'trough', which, as I have shown above, is a quite regular case of PWC *q^w.

Glottalised *q̣l^w is more difficult to reconstruct, but it may still be supposed in:

PC *ʔ^wə- 'be heard' : Ub. q̣^wə- id. : Abkh. *ha- id. (with secondary delabialisation) — although here it may have been *q̣l, with secondary labialisation in Ub. and Ad. under the influence of *q̣l^wə- 'hear';

PC *ʔ^wa-tə- 'crumple' : Abkh. *h^wa- 'to tan (leather)'.

As for the few words where Abkhaz has *q̣^w corresponding to PC *ʔ^w (but never at the same time to Ubykh q̣^w!) — they actually fall into quite a different row of correspondences, where Ubykh has q̣, see below.

Labialised palatalised uvulars

All these phonemes are rare, but have very systematic reflexes.

PWC *q̣^w > PC *q^w-, Ub. ɣ̣ Abkh. *h^(w)

Interestingly enough, Chirikba accepts this correspondence (present in the PWC word for 'pear', *q̣^wa > PC *q^wə-ʒə, Ub. ɣ̣a, Abkh. *ha) and also reconstructs *q̣^w here. It is, however, easy to see that the reconstruction *q̣^w is quite symmetrical to *q and *q^w in my system (cf. the regular fricativisation in *q > Abkh. *h, *q^w > Abkh. *h^w, but the absence of fricativisation in Chirikba's system, where *q > Abkh. *q and *q^w > Abkh. *q^w).

PWC *q̣l^w > PC *q̣^w, Ub. q̣, Abkh. *ʔ^w

This correspondence is attested in the word for 'horn', see above; since Chirikba does not accept tense consonants in PWC, he treats the material in a different way, which is less convincing to me.

PWC $*\acute{G}^w > PC *k^w$, Ub. \acute{k} , Abkh. $*k^w$

This phoneme can be reconstructed in: PC $*s^w\partial-k^w\partial$ 'to hate, envy' : Ub. $c^w\partial-m\acute{k}\partial$ id. : Abkh. $*c^w\partial-m\partial k\partial$ id. (with $-k-$ probably dissimilated $< *c^w\partial-m\partial k^w\partial$).

By analogy with other voiced uvulars ($*G$, $*G^w$) one would expect Chirikba to reconstruct $*\acute{k}^w$ here. However, he seems not to be aware of this example and reconstructs $*\acute{k}^w$ for the numeral 'nine' (PC $*b_k^w\partial$, Ub. $b\acute{k}\partial$, Abkh. $*z^w\partial$) — where I, with some doubt, reconstruct a velar $*\acute{\gamma}^w$ [NCED: 183]. As for the phoneme which I reconstruct as $*\acute{k}^w$ (PC $*k^w$: Ub. \acute{k} : Abkh. $*\acute{\gamma}^w$), Chirikba again reconstructs a quite improbable palatalised labialised emphatic laryngeal (pharyngeal) $*\acute{\gamma}^w$ (see p. 296), repeating what he did with PWC $*k$, $*\acute{k}$ and $*k^w$ (see above).

PWC $*\acute{q}^w > PC *ʔ^w$, Ub. \acute{q} , Abkh. $\acute{q}^w / \acute{\gamma}^w$

This correspondence is more or less the same as in Chirikba, p. 222. I must, however, make two remarks here:

a) Abkh. $*\acute{q}^w\partial na$ 'decoration on belt; belt, girdle' and Ub. $\acute{q}l\partial na$ 'clasp' can not be regarded as cognates with PC $*ʔ^w\partial na$ 'nail'; they are most probably borrowed from PC $*ʔ^w\partial na$ 'clasp', derived from $*ʔ^w\partial$ 'to clasp, buckle' (nowadays mainly with preverbs: cf. Kab. $\acute{s}\partial-ʔ^w\partial$ 'to clasp', $\acute{s}\partial-ʔ^w\partial-na$ 'clasp, buckle'); the latter corresponds well to the Ub. verbal root $\acute{q}\partial$ 'to clasp' and to Abkh. $*qa-\acute{\gamma}^w\partial$ 'to shut up' — see Chirikba, p. 210 (this is the only root in which he reconstructs voiced $*\acute{G}^w$). Therefore I would still stick to my etymology presented in [NCED: 527], where PC $*\acute{q}^w\partial na$ 'nail' is compared with Ub. $n\partial\acute{q}\partial$ id. and Abkh. $*c^w\partial-\acute{\gamma}^w\partial na\partial$ 'stake, peg' (Chirikba would have reconstructed $*\acute{G}^w$ here as well).

Thus, the Abkhaz reflex here appears to be $*\acute{\gamma}^w$. The Circassian and Abkhaz forms, therefore, reflect a secondary pharyngealisation (cf. the development of $*\acute{q}l^w$ and $*\acute{q}l^w$ described above) which is not surprising for palatalised uvulars (cf. also the development $*\acute{q} > *ʔ$ in Circassian, see above).

b) The correspondence PC $*ʔ^w$: Abkh. $*\acute{q}^w$, observed in a few cases, probably goes back to the same PWC phoneme, with a variation $\acute{q}^w / \acute{\gamma}^w$ in Abkhaz.

Pharyngealised uvulars

I have shown above that, despite Chirikba's skepticism, Ubykh pharyngealised uvulars in fact belong to quite distinct rows of correspondences. Here I shall merely sum up my reconstruction of pharyngealised uvular stops (affricates):

PWC **qI* : PC **q* : Ub. ? : Abkh. **ʕ*

Cf. **qIa-* 'locative preverb' (see above).

PWC **q̇I* : PC **q* : Ub. *q̇I* : Abkh. **h*

Cf. **q̇Iə-* 'bite' (see above).

PWC **q̇I* : PC **h* : Ub. *q* : Abkh. **q*

This correspondence (ignored by Chirikba) is observed in: PC **çə-hV-* 'trust' : Ub. *qā-ça-* : Abkh. **qa-ça-* id.; PC **həLV* 'wedge' : Ub. *qaLa* id.; PC **šha* 'head' : Abkh. **qa* id. (the Ub. form *ša* here reflects a contraction of the cluster **Sq̇I-*). Here, as also in the case of other palatalised pharyngealised uvulars, Ubykh loses pharyngealisation while Circassian preserves its traces in the emphatic laryngeal (pharyngeal) **h*.

PWC **q̇I* : PC **ʔ* : Ub. *q̇* : Abkh. **ʔ*

Cf. **q̇Ia-* 'to be', **q̇IV* 'place, locative affix', **gʷə-q̇Ia-* 'to worry' (see above).

PWC **q̇I* : PC **ʔ* : Ub. *q̇* : Abkh. **ʕ* / **h*

Cf. **q̇Ia* 'sweet', **q̇Ia* 'speak' (see above).

PWC **qIʷ* : PC **qʷ-* : Ub. *χIʷ* : Abkh. **hʷ*

This correspondence (regarded as "irregular" by Chirikba on p. 216, but perfectly well explainable if one assumes pharyngealisation in PWC to be archaic) is observed in: PC **qʷa* : Ub. *χIʷa* : Abkh. **hʷa* 'pig, swine'.

PWC **qIʷ* : PC **qʷ* : Ub. *qI* : Abkh. **ʕʷ*

Cf. **qIʷaLa* 'jackdaw', **qIʷa-* 'village', **qIʷV-* 'to run', **ʔəqIʷa* 'monster', **bəqIʷə* 'bone, skeleton' (see above).

PWC **q̇Iʷ* : PC **qʷ* : Ub. *q̇Iʷ* : Abkh. **qʷ* / **qʷ*

Cf. **q̇Iʷa* 'ravine', **q̇Iʷə-* 'bend' (and **q̇Iʷəq̇Iʷə-* 'to huddle oneself, squat'), **q̇Iʷə* 'hair' (see above).

PWC **q̇Iʷ* : PC **h* : Ub. *χʷ* : Abkh. **qʷ*

This correspondence (ignored by Chirikba) is very similar to $*q̣l$ (except for the obvious labialisation); note that Ubykh has χ^w — fricativised (as in $*q̣l^w > \chi l^w$) and depalatalised (as in all other palatalised pharyngealised rows). It is observed in: PC $*ha$ 'wheat' : Ub. $\chi^w a$: Abkh. $*q̣^w a - ʒa$ id.; PC $*ha - dá$ 'dead body' : Tap. $q̣^w a - di$ id.; PC $*ʔa - ha$ 'part' : Abkh. $*q̣^w a$ id.

PWC $*q̣l^w$: PC $*ʔ^w$: Ub. $q̣^w$: Abkh. $*\gamma^w$

Cf. $*q̣l^w a -$ 'thresh', $*Tq̣l^w V$ 'two', $*q̣l^w V -$ 'hear' (see above).

PWC $*q̣l^w$: PC $*ʔ^w$: Ub. $q̣^w$: $*h^w$

Cf. $*q̣l^w V -$ 'be heard, resound', $*q̣l^w a -$ 'crumple, tan' (see above).

It is easy to see that the correspondences for pharyngealised uvulars form a rather elegant system (note also its interesting feature, distinguishing it from the system of other uvulars — a complete lack of voiced pharyngealised stops / affricates) and allow to explain quite a few cases treated by Chirikba as unmotivated splits or simply "irregular" developments.

Front (and middle) sibilant affricates

A preliminary remark: Chirikba reconstructs front sibilant affricates and middle sibilant affricates, although the two series are in evident complementary distribution, and, in fact, form a single series: $*C - *C̣ - *C^w - *C̣^w$, just as in other local series of consonants. The second and third member of this quaternion are regarded by Chirikba as "middle sibilant affricates", and he does not reconstruct palatalised labialised affricates at all.

I must say that the part of the book concerning sibilants is probably the weakest. Chirikba here completely ignores the real complicated situation with affricate correspondences and devises an almost imaginary system which needs to be totally rewritten. He completely disregards the system presented in [NCED] and basically projects the Common Abkhaz system of affricates onto the WC reconstruction — which is, from my point of view, absolutely untenable. Below I shall try to give a systematic discussion of all the intricacies of PWC sibilant reconstruction (what I tried to do in [NCED: 185–187] — briefly and apparently unsuccessfully, judging by the complete disregard of all my arguments in Chirikba's book).

Let us discuss, one by one, all the correspondences proposed by Chirikba.

PWC * ʒ > PC * ʒ : Ub. ʒ : Abkh. * ʒ

Except for the fact that PC here has a variation * ʒ / * z (a fact mentioned in [NCED] and implicitly present in Chirikba's examples) this seems to be the same correspondence as in [NCED: 181]. Minor corrections:

a) Common Abkhaz has not * māʒa , but * māza 'moon, month', and for PC * māza : Ub. māʒa : Abkh. * māza I reconstruct not PWC * māʒa , but * māza ;

b) instead of * māʒa 'light' I reconstruct * bāʒa , adding here PC * bʒa-jā 'ray' as well;

c) Chirikba is stretching the evidence while comparing Ub. māʒa-bʷanā 'spruce, silver fir' with PC * māʒa 'forest' and Abkh. * māza 'pine'. It does not really matter if māʒa-bʷanā is a misrecording of Mészáros's (as suggested by Dumézil) or a compound 'light + tree' (as suggested by Mészáros himself); in any case the comparison of the Abkh. and Ad. forms with Ub. māʒa 'prickle' (otherwise left without any etymology) seems much more preferable to me.

Chirikba refutes it because of "the irregular correspondence between sibilants" (p. 225) — which is quite wrong. We have very similar correspondences in: PC * wə-zə 'illness' ([Chirikba: 255]: 'etymology remains unclear' (?) : Ub. ʒa-bʷá id. : Abkh. * čəma-za- 'be ill' (the word simply means 'to be ill' in all dialects and I cannot agree with Chirikba's treating it as 'have a tumour', see p. 255); PC * qa-bʒá 'clean' : Ub. pčə (assimilation < * pʒa) id. : Abkh. * bāʒa-jā 'good'.

In this case Chirikba obviously tries to dismiss several well established lexical parallels simply because he does not want to violate his system of correspondences, according to which "middle" affricates and sibilants should correspond to each other in all WC branches. See the discussion of * ʒ , * ś and * ʒ (as well as * ž , * š and * ž) below.

PWC * c > PC * c , * c : Ub. c : Abkh. c

Here we quite obviously deal with two correspondences:

a) PWC * c > PC * s- , c : Ub. c : Abkh. c .

PC * s and * c are here in complementary distribution (* s appearing word-initially, * c — word-medially; note that word-initial * c- is extremely rare in PC, being actually present only in one root — * cə 'hair', having no known etymology), cf.:

PC * sa- 'get accustomed' : Ub. ca- : Abkh. * śə-ca- (Chirikba lists this example but does not mention PC * s in the header of his correspondence,

evidently trying to avoid an unpleasantly unmotivated three-way split of WC **c* into PC **c̣*, **c* and **s*);

PC **sə-* 'to burn' : Ub. *ca* 'hot' : Abkh. **ca* id. (Chirikba also lists PC **casa* 'spit' which actually does not exist: Kab. *žāsa* is a secondary variant (possibly under the influence of *sa* 'knife'), cf. Ad. *cāca* < **caça*; see the discussion in [NCED: 1091]. Anyway, **sə-* 'burn' seems to be a much better match for 'hot' than 'spit');

PC **waraca* 'dung' : Abkh. **wacə*;

PC **la-χ-ca* 'offshoot from the root' : Abkh. **-cə* 'root'.

b) PWC **c̣* > PC **c̣* : Ub. *c* : Abkh. *c*.

Most other roots (**ca* 'tooth', **cV* 'grain', **cəGwV* 'mouse') belong in this category.

Here, as in all other cases, Chirikba has to suppose an unmotivated split in Circassian in order to lump together the reflexes of **c* and **c̣*.

PWC **c̣* > PC **c̣* : Ub. *ç* : Abkh. **ç*

This correspondence is the same as in [NCED: 181].

PWC **ž* > PC **ž*, **ẓ̌* : Ub. *ž* : Abkh. **ž*

The reflexes of **ž* in [NCED: 181] are formulated as follows: PC **ž* / *z*, Ub. **ž*, Abkh. **ž*. Chirikba includes in his examples forms with PC **z* (**za* 'cornel fruit', **zə* 'decant, filter'), thus basically agreeing with the correspondence formulated in [NCED], although for some reason he does not include PC **z* in his tables of correspondences.

However, he also lumps together forms with PC **ẓ̌*, such as PC **ža* : Abkh. **žə* 'to roast, bake' and PC **žə-jə* 'young of animals' : Abkh. **žə-śə* 'kid'. These actually belong to a completely different set of correspondences, where Ubykh has *ẓ̌^w* and where I [NCED: 182] reconstruct PWC **ẓ̌^w*:

PC **ža* : Ub. *ẓ̌^wa-* : Abkh. **žə-* 'to roast, bake';

PC **bža* 'horn; hoof, (finger/toe)nail' : Ub. *-ẓ̌^wa* '(finger/toe)nail' : Abkh. **-məža* in Tap. *ša-mza* 'hoof';

PC **žaža* 'slow' : Abkh. **žaža* id.

The reason why Chirikba does not accept these parallels is his preconception that 'there are no traces of labialised-palatalised affricates' (p. 223) — which, as I intend to show, is quite wrong — see below.

Also, quite unexpectedly, in № 10 we meet Ub. *za-* 'to decant, filter' corresponding to PC **zə* and Abkh. **r-aža-* id. This is, in fact, one of the

rather numerous sets of correspondences, completely ignored or mistreated by Chirikba, where Ubykh and Circassian have front affricates while Abkhaz has palatalised ('middle') affricates (Circassian preserves frontness or 'middleness' only in the glottalised series, probably because of an early variation $*\check{c} > *š$; note that $*\check{c}$ and $*š$ are not opposed in PC, which is why I write $*\check{c}$, while Chirikba, following Kuipers, writes $*š$). The examples are:

PC $*sa$ 'yesterday' (in compounds) : Abkh. $*\acute{c}a$ id. (in compounds) : Ub. ca , $wa-cá$ 'tonight' (Chirikba, p. 230, omits the Ubykh form and treats the etymology as if it were reflecting PWC $*\acute{c}$ — where Ubykh should have had \acute{c});

PC $*-za$ (in $*b\check{z}a-j\check{a}-za$) 'span' : Abkh. $*\acute{z}a$ id. : Ub. za id. (ignored by Chirikba);

PC $*za$ 'decant, filter' : Abkh. $*r-a\acute{z}a-$ id. : Ub. $za-$ id. (regarded by Chirikba — contrarily to his own correspondences — as reflecting PWC $*\acute{z}$, see above);

PC $*wasa-psa$ 'dew' : Abkh. $*(a)\acute{z}V$ id. : Ub. $z^wa-\acute{z}a$ 'snow' (PC $*wasa-$ instead of $*waza-$ due to contamination with $*was\check{a}$ 'snow' — which actually corresponds to a different Abkh. root, $*\acute{s}a-$ 'snow', see the analysis in [NCED: 675]. Chirikba finds "phonetic differences between all these forms too great to accept their relationship" (p. 224), and ends up comparing only Ub. $za-$ 'snow' with Tap. $a\acute{z}a$ 'dew, hoarfrost', simply discarding all the other Abkhaz and Circassian evidence);

Abkh. $*\acute{z}am\check{a}\check{w}a$ 'cheek' : Ub. $\acute{z}am\check{a}$ 'chin' (ignored by Chirikba);

PC $*\acute{c}a-$ 'to pass (of time)' : Abkh. $*\acute{c}a-$ id. : Ub. $\acute{c}a-$ id. (Chirikba, p. 233, reconstructs here $*\acute{c}$ — which forces him to postulate a tremendous number of unmotivated splits: PWC $*\acute{c} > PC * \acute{c}, * \acute{c}$; Ub. $\acute{c}, \acute{c}, \acute{c}$; Abkh. $*\acute{c}, * \acute{c}$ — see the discussion of this correspondence below);

Abkh. $*ra-ba\acute{c}a-$: Ub. $ba\acute{c}a-$ 'crush, crumple' (same case as the preceding one).

There also exist parallel rows of fricative correspondences:

PC $*psa-$ 'to plane' : Abkh. $*p\acute{s}a-$ id. : Ub. $psa-$ 'to whet' (ignored by Chirikba);

PC $*p\check{c}a-$ (assimilation $< *psa-$, see above) 'fish' : Abkh. $*p\acute{s}a-$ id. : Ub. psa id. (listed by Chirikba in a different section, on p. 337, without any explanation of the correspondence between sibilants);

PC $*\lambda a-psa$ 'root' : Abkh. $*m\acute{s}a$ 'horn, horn matter' : Ub. $\lambda a-ms\acute{a}$ 'root'. The Ub. form is separated from the obvious PC and Abkh. parallels in Chirikba, p. 337, and instead compared with PC $*na-p\check{c}a$ 'eyebrow' (?);

PC $*zaz\check{a}$ 'gall' : Abkh. $*(a)\acute{z}a$ id. : (?) Ub. $-ca$ in $\acute{c}^wa-cá$ 'gall' (possibly assimilation $< *\acute{c}^wa-zá$). The Bzyp form recorded in [Mapp 1926] is $a-\acute{z}$ and

forms a minimal pair with *a-z* 'bush, shrub'; thus the reconstruction **zə* in Chirikba, p. 249, and his comment on the next page are incorrect;

PC **za* / **zə* 'reciprocity prefix' : Ub. *za-* id. : Abkh. **žə* 'for (smb.); prefix of the object version' (ignored by Chirikba);

PC **za-* 'to meet smb.' : Abkh. **žə-* 'to meet, gather' (ignored by Chirikba).

Below I will show that no rows of correspondences like "PC **č* : Ub. *č* : Abkh. **č'*" actually exist (despite seemingly numerous examples provided by Chirikba). That is why already in 1978 [Старостин 1978] I had proposed to reconstruct PWC plain back affricates and fricatives (**č*, **ž*, **č'*, **š*, **ž'*) for the peculiar set of correspondences presented above, presuming that they had lost the second (back) focus in Ubykh and Circassian (**č* > *c*, **š* > *s* etc.) whereas in Abkhaz said focus was transformed to middle (**č* > *č'*, **š* > *š'* etc.). All non-palatalised back affricates and fricatives in modern WC languages are witnessed in more complicated rows of correspondences (see below) and actually can only be traced to labialised back affricates: i. e., similar (but slightly different) shifts must have taken place in all three WC branches, involving first the loss of plain (non-palatalised) back affricates, with a subsequent filling of the freed space by moving either **č^w* or **č'^w* to *č* through delabialisation. This allows us

1) to explain all the existing evidence without hiding any of it;

2) to explain the peculiar phonetic development in individual WC branches;

3) to explain external evidence (which seems to be the least concern for Chirikba, but is certainly necessary in any historical research). Here I must say that most external (East Caucasian) cognates available for the presented list of cases do indeed demonstrate back (hushing) affricates or sibilants: cf. **čVmhV* 'span' : WC **ža* [NCED: 391–392]; **Hōžāl* 'strain, milk' : WC **žV* 'filter' [NCED: 600]; **čāmaGū* 'jaw' : WC **žamə^wa* [NCED: 339]; **bīnšwV* 'pipe, horn' : WC **pāša* [NCED: 307–308]; **žāwV* 'kidney' : WC **žə* 'gall' [NCED: 1106]. Exceptions include only **jāmzĀ* 'snow' (WC **žV*) and **bVšwA* 'fish' (WC **pāšA*); these require a special explanation but are certainly in the minority.

WC **ž^w* > PC **ž^w* : Ub. *ž^w* : Abkh. **ž^w*, **z^w*

This is generally a correct correspondence, although I know only one example: PC **ž^wa* 'to dam, fill (with water)' : Abkh. **ž^wa-z^wa-* 'to wash' (Chirikba compares the PC form with different Abkh. forms meaning 'vomit' or 'sperm', admitting himself that the comparison is 'tentative because of

the semantics'). For Ub. $z^w a-$ 'drink' : Abkh. $*z^w a-$ id. I prefer to reconstruct $*z^w$ — with the same variation z^w/z^w in Ubykh as in its reflexes of $*z$ ($> Ub. z/3$). Thus the Ubykh reflex of $*z^w$ is actually unknown, and all we know of the reflexation of PWC $*z^w$ is $> PC *z^w$: Abkh. $*z^w$ [NCED: 181].

It is important to note that, although Chirikba treats this as one of the "middle sibilants", from a phonological point of view this is simply a labialised front affricate, and the notation $*z^w$ is plainly excessive.

WC $*c > PC *s$: Ub. c : Abkh. $*c$

The correspondence is correct, cf. [NCED: 181]. Note the same fricativisation in PC ($*c > s$) as in $*c$ ($*c > s$, see above).

Here Chirikba lists only one PC reflex ($*s$) without adding any tense variant ($*c$). He himself, however, speaks about a possibility of reconstructing $*c a z a$ 'marten, weasel' (p. 224 in footnote 4) on the basis of PC $*c a z a$, Ub. $c a c a$ and Tap. $z a z a c$. This is where I reconstruct tense $*c$ (see [NCED] *ibid.*). Of course, this is just a single example; but the reader should be already used to the uniqueness or rarity of many PWC phonemes. What really matters in a system like this is a combination of distinctive features yielding systematic reflexes.

Although generally the correspondence is OK, the first example given by Chirikba (PC $*s a$ 'yesterday' : Abkh. $*c a$ id.) does actually demonstrate quite a different correlation (PWC $*c$, see above). Chirikba does not list the Ubykh parallel here, which is quite transparent: Ub. ca , $wa-ca$ 'tonight'.

WC $*c^w > PC *c^w$, $*c^w$: Ub. c^w : Abkh. $*c^w$

Just like in the case with $*c$ (see above), Chirikba lumps together two correspondences:

- a) WC $*c^w > PC *s^w$, c^w : Ub. c^w : Abkh. $*c^w$;
- b) WC $*c^w > PC *c^w$, Ub. c^w , Abkh. $*c^w$.

I cannot stop wondering why Chirikba is ready to accept PWC $*c > PC *s$ (in $*s a-$ 'yesterday') and PWC $*c > PC *s$ (in $*s a-$ 'get accustomed', see above) but protests against such a perfect match as Ub. $c^w a$ 'skin' : PC $*s^w a$ id. : Abkh. $*c^w a$ id.

Other examples of the same fricativisation (ignored by Chirikba) are:

PC $*s^w a- b^w a-$ 'to hate, envy' : Ub. $c^w a- m k a-$ id. : Abkh. $*c^w a- m a k a-$ id.;

PC $*s^w a-$ / $*s^w a-$ 'drink, suck' : Abkh. $*c^w a-$ 'suck' (CA $*s^w a-$ 'suck', quoted by Chirikba on p. 259 and reconstructed on the basis of a Bzyp

form cited once in [Бражѳа 1964], is rather dubious; so is the Shapsygh form $\acute{c}^{\nu}a-\lambda a$ 'suck', apparently recorded by Chirikba from the isolect of his Shapsygh informant in Turkey and likewise, not attested elsewhere).

As in the case with $*\mathfrak{z}^w$, these are actually correspondences not for PWC 'middle affricates' but for PWC front labialised affricates.

PWC $*\acute{c} > \text{PC } *c, *c : \text{Ub. } \acute{c}, c, \acute{c} : \text{Abkh. } *c, *c$

From the abundance of unmotivated 'commas' in this row of correspondences it is immediately clear that Chirikba again confuses several rows.

The normal reflexes of $*\acute{c}$ are quite symmetrical with reflexes of other palatalised front affricates (or 'middle affricates' in Chirikba's terms), i. e. $*c$ in PC (cf. $*s/c, *c, *z/z$ above), but \acute{c} in Ubykh and in Common Abkhaz (cf. Ub. \acute{c}, \mathfrak{z} , Abkh. $*c, *z$ above). It is easy to observe in most examples adduced by Chirikba (№ 2, 3, 4, 5, 6, 7, 8, 9, 15; I have some objections against individual aspects of some of those comparisons, but I shall not go into details right now, because the basic correspondence is correct).

However, Chirikba adds a lot of absolutely heterogeneous examples to the same row of correspondences:

(1) Ub. $\acute{c}a-$ 'know, learn' : Abkh. $*\acute{c}a-$ 'to learn' : PC $*\acute{c}-\mathfrak{z}a-$ 'to know'. Here apparently $*\acute{c}-$ is preserved in PC because of the cluster $*\acute{c}\mathfrak{z}-$ (not opposed to $*c\mathfrak{z}-$ in PC) [NCED: 262]. This is not, therefore, a good case of PWC $*\acute{c} > \text{PC } *c$; note also that when the suffix $-\mathfrak{z}a-$ is absent, PC has a standard $*c-$ here (Kab. $\acute{c}a-x^w a-$ 'be acquainted').

(13) Ub. $b\acute{c}a-$: Abkh. $*b\acute{c}a-$ 'crush' and (14) Ub. $\acute{c}a-$: Abkh. $*\acute{c}a-$: PC $*\acute{c}a-$ 'to pass (of time)' are an absolutely different case, which is easy to see because Ubykh has not \acute{c} here, but c . This is actually one of the rather numerous examples where Abkhaz has a palatalised ('middle') affricate, corresponding to an Ubykh front affricate, and for PWC $*\acute{c}$ should be reconstructed here (see above).

(10) Ub. $m\acute{c}a$: Abkh. $*m\acute{c}a$: PC $*p\acute{c}a$ 'lie', as well as (16) Ub. $b\acute{c}a$: Abkh. $*q\acute{a}-b\acute{c}a$: PC $*p\acute{c}a$ 'entire, thick' actually reflect not $*\acute{c}$, but $*c$. In these cases we have to reconstruct a glottalised $*p$, resulting in a secondary assimilation in PC ($*p\acute{c}V$ 'lie' and $*p\acute{c}V$ 'entire, thick').

(11) Abkh. $j\acute{c}-\acute{c}a-\acute{g}(\acute{a})$ 'more' is an adverbial formation literally meaning 'and under (him, it)', i. e. 'additionally' (and is translated into Russian not as 'больше', but as 'еще', Germ. 'noch'). Anyway, Abkh. $*c$ cannot correspond to Ub. \acute{c} ($\acute{c}a-$ 'comparative prefix') even by Chirikba's own rules (so that one more comma should be added: PWC $*\acute{c} > \dots$ Abkh. $*c, *c, *c!$)

(12) Ub. *ča* 'bottom' : Abkh. **ča* id. Here we see a correlation quite opposite to, e. g., № 13 and 14, but still crammed by Chirikba into the same correspondence. The well known Circassian parallel is here ignored by Chirikba because it does not fit into his scheme at all. What I mean is PC **č̣a-* 'below, bottom' (used as a preverb and exactly matching Abkh. **ča-* in the same function).

Here, again, Chirikba is holding back evidence presented by others. The same correlation between Ub. and PC is also seen in: Ub. *p̣ča-blá* 'dream' : PC **p̣č̣a-hapa* id.; Ub. *p̣ča-pá* 'leaf' : PC **p̣č̣a-sa* id.

In Abkhaz the correspondences are rather peculiar: we have **ča* 'bottom, below', but **paxá-za* 'dream', with *-x-* corresponding this time to Ub. *č* and PC **č̣*. The matter is clarified after adding yet another example: PC **p̣č̣a-n̄ta* 'sweat' : Abkh. **paxa-za* id.

It is not difficult to see that we deal here with a rather peculiar correspondence: Ub. *č* : PC **č̣* : Abkh. **x* before a following affricate, but **č* elsewhere [NCED: 182]. If we turn to external evidence, we shall see that all four examples of this correspondence have very good Eastern Caucasian matches containing exactly one and the same phoneme: not a sibilant, but a glottalised lateral **ɬ*: cf. PEC **Hɬõnũ* 'bottom' [NCED: 590–591], **hemɬã* 'dream' [NCED: 512–513], **ɬwĩrʔV* 'leaf' [NCED: 784–785] and **hãmɬã* 'sweat' [NCED: 509]. The semantic equivalents are absolutely exact, and there is not a single chance of a fortuitous coincidence here.

Both Circassian and Ubykh at present have only one glottalised lateral phoneme, *ɬ*; since this phoneme — as well as other modern laterals — is phonetically palatalised, we can safely assume that it was **ɬ* in PWC (the palatalisation is additionally proved by its Abkhaz reflex, **š*). Therefore we can, with equal safety, reconstruct a non-palatalised **ɬ* in PWC for the PC **č̣* : Ub. *č̣* : Abkh. **č/*x* row of correspondences (see more below in the section on laterals).

All of this argumentation is completely skipped by Chirikba (who, as we have seen, ignores the PC parallel for 'bottom' and does not even mention the roots for 'dream', 'leaf' and 'sweat' in his book).

PWC **č̣^w* > PC **č̣^w* : Ub. *č̣^w* : Abkh. **č̣^w*

This correspondence is correct [NCED: 181] but should also be subject to at least one amendment.

Chirikba (pp. 234, 235) compares PC **č̣^wa-* (in **č̣^wa-ča*) 'black' with Abkh. **-č̣^wa* (in **ajəḳ^wa-č̣^wa*) 'black', which is a traditional comparison, but eliminates Ub. *ǰa* 'black' (a comparison which, according to him, is difficult to

accept), adding instead Ub. *wə-č^wa* 'iron' (explained as 'black metal'). He forgets to mention, however, that:

a) a very similar correspondence is observed in the common WC word for 'fire' (PC **mač^wá*, Ub. *məžá*, Abkh. **māca*), although one has to presume a secondary deglottalisation in Abkhaz. I would think here of a secondary delabialisation (possibly due to the dissimilatory effect of initial **m-* in 'fire', with a less clear reason in the Ubykh word for 'black'); since Ubykh has no back labialised affricates, delabialisation could result in a shift of the original place of articulation from front to back due to neutralisation (**ʒ^w* could be treated as **ʒ^w*, delabialised to *ʒ*). The reason for voicing in Ubykh is not clear.

Despite phonetic difficulties there is little doubt that the words for 'black' and 'fire' (the latter missing from Chirikba's book altogether) should be reconstructed with PWC **č^w*. External cognates have **č* in both cases (cf. PEC **čĀwnV* 'dark' [NCED: 352], **čǎjǎ* 'fire' [NCED: 354–355]);

b) Ub. *wə-č^wa* 'iron' is, however, quite a different case. The closest parallel for the word (not mentioned by Chirikba, but well known to all Caucasologists) is PC **b^wəčá* 'iron'. Here we have an entirely different phonetic correspondence, observed also in: PC **čə* 'earth' : Ub. *jə-č^wá-* 'on the ground' (with a secondary deglottalised variant *jə-č^wá* id.)

Moreover, *-čə* in PC **b^wəčá* 'iron' is certainly not 'black', but 'blue', cf. PC **čə-x^wə* 'blue' — which leads us to the Abkhaz match **ja-č^wa* 'blue' (having nothing to do with **ajək^wa-č^wa* 'black' and its counterparts: PC **č^wə-ča* and Ub. *žá*). We arrive, therefore, at a new correspondence, not discovered by Chirikba at all:

PC **č* : Ub. *č^w* : Abkh. **č^w*

Just like in the case with PC **č* : Ub. *č* : Abkh. **č/*x* (see above), this is a correspondence not fitting into any of the affricate series; fortunately, we have Eastern Caucasian parallels for both words here, and those parallels also have laterals: cf. **lhemłwǎ* 'earth' [NCED: 747–748] and **nHǎłwǎ* 'blue' [NCED: 851–852]. The obvious thing to do is to reconstruct here **ł^w* for PWC (see more below about laterals).

Back affricates

WC **ž* > PC **ž* : Ub. *ž* : Abkh. **ž*

This row of correspondences can hardly produce anything but amazement. It is well known that no **ž* is reconstructable for Proto-Circassian;

Kuipers' dictionary does not list a single root with this phoneme. I spent some time trying to identify the source of PC **baʒə* 'to fall', cited by Chirikba as his first example (compared with Abkh. **kʷə-baʒə* 'to press hard on smth.'), but was completely unsuccessful.

In the second (and last) example (PC **ʒə* 'vomit' : Ub. *ʒə* id.) Chirikba omits the well known Abkhaz counterpart (Abkh. **ʒʷə* 'vomit' — which he instead compares with PC **ʒʷə* 'to dam, fill' and **ħa-(n)ʒʷə* 'haystack' (?), see p. 229).

It is immediately evident that the row PC **ʒ* : Ub. *ʒ* : Abkh. **ʒʷ* reflects some labialised PWC phoneme. In [NCED: 182] I reconstruct PWC **ʒʷ* (unfortunately there is a misprint: PAK **ʒ* instead of PAK **ʒʷ* on p. 182; however, the PC form is cited correctly in the body of the dictionary, p. 283, where PWC **ʒʷə* 'vomit' is compared with PEC **=āwčĀ* 'emit, pour, vomit').

This is one of a series of affricate correspondences where Abkhaz for the most part has labialised fricatives (**zʷ*, **ʒʷ*, **sʷ*; however, **čʷ* > **č*, **čʷ* > *č* and **šʷ* > *š*), Ubykh uniformly shows non-palatalised back affricates or sibilants (*č*, *ʒ*, *č*, *š*, *ʒ*), and in Circassian the reflexes are split: we have palatalised back affricates (**č̣*, **č̣̣*, **ʒ̣*, **č̣̣̣*), but non-palatalised fricatives (**š*, **ṣ̌*, **ʒ*). This complicated system is a result of several successive shifts of the features of labialisation and palatalisation in individual branches, all described in [NCED: 185-187] and completely ignored or misinterpreted by Chirikba. For the described set I reconstruct PWC back labialised affricates and sibilants (**čʷ*, **č̣ʷ*, **ʒʷ*, **č̣ʷ*, **šʷ*, **ʒʷ*) with the following examples:

PC **č̣aḍə* 'donkey' : Ub. *čaḍə* id. : Abkh. **čaḍə* id. (**čʷədV*);

Ub. *ča-* 'break' : Abkh. **pə-čə-* id. (**čʷV-*);

PC **č̣ə-ħa-* 'to roll, wind, wrap' : Ub. *čə-da-* 'twist, spin' : Abkh. **rə-čə-* 'fold, wrap' (**čʷə-*);

PC **č̣amağə* 'sickle' (> Ub. *čamág*) : Abkh. **čabagV* id. (**čʷVmVgV*);

PC **č̣ana* 'sharp' : Ub. *čan-* 'to whet' (**č̣ʷana*);

PC **p̣č̣anda-χʷə* 'starling' : Abkh. **zʷarədʷə-na* (**č̣ʷaNaədʷV*);

PC **č̣ə* 'young, new' : Ub. *ča* 'good' : Abkh. **ča* 'young, new' (**č̣ʷə*) [Chirikba. p. 244, 245 separates the Ubykh form and compares it with Abkh. **čajə* 'good' — which is hardly plausible because of lack of glottalisation in Abkhaz];

PC **č̣apə* 'hemp' : Ub. *čəp* (**č̣ʷVpV* with metathesis of glottalisation in Ub.);

PC **kač̣ə* 'short' : Abkhaz **kač̣ə* id. (**kač̣ʷə*);

PC **č̣ʷə-mač̣ə* 'coal' ('black wood') : Abkh. **mač̣ə* 'wood (material)' (**mač̣ʷə*);

PC **bamač̣ə* 'tick' : Abkh. **bač̣ə* id. (Chirikba 245) (**ba(mə)č̣ʷə*);

Ub. *čə-* 'press, squeeze' : Abkh. **rə-čəčə-* 'squeeze' (**č^wV-*);

PC **žə-* 'vomit' : Ub. *žə-* : Abkh. **ž^wa-* (**ž^wa-*, see above; PC here has a secondary fricativisation, which is why we have **ž*, not **ẓ̌*);

PC **mažá-ga* 'dough' : Abkh. **maz^wa* (**maž^wa*);

PC **šχ^wa* 'grass; poison' : Ub. *šχ^wa* id. : Abkh. **q^wəš^wə* 'medicine; poison, powder' (**š^wəq^wV*, with regular fricativisation in the cluster **šq^w > *šχ^w* in Ub. and PC; [Chirikba 1996] reconstructs Common Abkhaz **q^wəš^wə*, but [Marr 1926] cites the Bzyp form as *á-χ^wš^v*, not *á-χ^wš^v*, which makes me reconstruct **q^wəš^wə*);

Ub. *šχ^wa-bá* : Abkh. **s^waqə* 'foam' (**s^wVq^wV*, with the same fricativisation in Ub. as in the preceding item);

PC **šəg^wə* 'mountain top' : Ub. *šak^wa* id. (**š^wVk^wV*, with deglottalisation in PC);

PC **naša* 'melon, cucumber' : Ub. *náša* id. : Abkh. **naša* id. (**naš^wa*);

PC **ma-ša* 'cave' : Ub. *ša-* 'dig' : Abkh. **tə-ša* 'cave, pit' (**š^wa*);

PC **laša* 'strong' : Ub. *laš(ə)* id. (**laš^wə*);

PC **ža* 'sledge' : Ub. *ža* 'block, sledge' (**ž^wa*);

PC **ža-* 'wait' : Ub. *žə-* 'endure' (**ž^wV*; not quite clear is whether Abkh. **la-ža-* 'endure' belongs here or not; secondary delabialisation < **la-ž^wa-* = **la-ž^wa-*?)

Thus we see that nothing as simple and beautiful as the correspondence **ẓ̌ : *ẓ̌ : *ẓ̌* actually exists in WC. Instead, we have discovered a whole series of examples allowing us to reconstruct PWC labialised back sibilants. As for PWC **ẓ̌* (as well as **č̣*, **č̣*, **č̣* etc.), it certainly existed but yielded quite different reflexes (PC **z*, Ub. *ž*, Abkh. **ẓ̌*, see above).

WC **ẓ̌ > PC *ẓ̌ : Ub. ẓ̌ : Abkh. *ẓ̌*

This is the same correspondence (and the same reconstruction) as in [NCED: 182]. It is interesting to note that palatalised back affricates turned out to be much more conservative in WC than their non-palatalised counterparts; note also that back (hushing) affricates are very frequently palatalised in different languages: e. g., all Caucasian languages that possess back affricates but do not possess a distinction in palatalisation in fact have palatalised back affricates.

Most of the examples produced by Chirikba do indeed demonstrate PWC **ẓ̌*. There is, however, one root which is quite aberrant (№ 2), where Chirikba compares Ad. (not even PC!) *ža-* 'hearth, place before the hearth' (in compounds) with Ub. *ža* 'back (side)' (cf. also *za(n)-žá* 'middle, half'). From Abkhaz Chirikba takes **žəq^wə* 'hump, humpbacked' — which is rather

awkward semantically; in my opinion, a much better match is Abkh. **bəža* 'middle, half'.

Now the problem here is not only with the Abkhaz parallel; it is the PC reconstruction itself that raises doubts. Kabardian has a *ž-* here (found in a perfect match: Kab. *žag^w* 'hearth' = Ad. *žag^wə*) instead of an expected **žag^w* (< PC **ž*). This is, in fact, one of the very few Circassian roots where S. Nikolayev has reconstructed PC palatal ('middle') affricates **č* and **ž* (no **č* is to be found), in addition to the well established glottalised **č̣* (usually regarded as **š* and being somewhat excessive in the PC system). The common feature of all words with **č*, **ž* is that in Adyghe they develop just like palatalised back affricates (= *č̣*, *ẓ̌*), but in Kabardian yield middle fricatives (unlike other affricates that yield back fricatives). Cf. Ad. *žag^wə* 'hearth', *žə-nəq^w* 'place before the hearth' : Kab. *žag^w* 'hearth' < PC **žə*; Ad. *pčə-dəž* 'morning', *pčəha-šəha* 'evening' : Kab. *pša-džəž* 'morning', *pšəha-šəha* 'evening' < PC **pča-*.

Despite their rarity, the PC palatal ('middle') affricates reveal quite systematic external parallels: in all the cases they correspond to Ubykh palatalised back affricates (which is why Chirikba took this to be a case of PWC **ž*) and to Abkhaz non-palatalised back affricates or fricatives [NCED: 182]. Cf.:

PC **žə-* 'hearth, place before the hearth' : Ub. *žə* 'back; middle, half' : Abkh. **bəža* 'middle, half';

PC **pča-* 'morning / evening (*dawn)' : Ub. *-ẓ̌* in *s^wə-ẓ̌* 'morning dawn' (*s^wə-* / *s^wə-* 'white, morning dawn'), *z^wə-psə-ẓ̌* 'evening, twilight' (*z^wə-psə* 'evening') : Abkh. **bəčə* > **bəžə* (through assimilation) > Tap. *-bəž* in *a-la-bəž* 'dusk, twilight';

PC **čə-* 'close' : Ub. *čə-c^wə-* id.;

PC **čə-* 'do, make' : Abkh. **čə-* / **čə-* id.

This is the series where I have reconstructed PWC palatalised labialised front affricates (**ž^wə* 'hearth, middle'; **bəč^wV* 'dawn'; **č^wV-* 'close'; **č^wV-* 'do, make') for two reasons: a) in Circassian they develop into palatalised ('middle') affricates (this is evidently a shift development: after the original front palatalised affricates had lost palatalisation — see above — their labialised correlates lost the labialisation and filled the free slots); b) in Abkhaz and Ubykh they develop the same way as the original palatalised labialised back affricates (**č̣^w*, **ẓ̌^w*, **č̣^w*, see below).

WC **ž^w* > PC **č* : Ub. *ž* : Abkh. **ž^w*

Chirikba lists only one example: PC **čə-γə* 'ribs' : Ub. *žə-* 'beside' (preverb) : Abkh. **ž^wə* 'rib, side; (preverb) beside'. This is basically a correct

comparison, although the PC form cannot be reconstructed as **ca-ya*. It contains, in fact, a specific rare phoneme that S. Nikolayev has reconstructed as PC **Ł* and which yields *γ* in Adyghe but *ž* in Kabardian (cf. Ad. *cāya*, Kab. *žāža* 'rib'); in [Kuipers 1975] it is not listed at all, since Kuipers considers it to be irregular. Common Abkhaz **ž^w* is in fact in the same position: it is contained only in one root (listed above), see [Chirikba 1996: 79]. This obviously suggests that the correspondence here is between PC **Ł*, Ub. *ž* and Abkh. **ž^w*.

This is, in fact, one of a series of correspondences involving very rare Common Abkhaz phonemes **č^w*, **č̣^w* and **ž^w*, notably:

Abkh. **č^wə* 'six' : PC **xə*, **xa* : Ub. *fə* id.;

Abkh. **č^wə* 'lightning, god of thunder and lightning' : Ub. *fa-* preverb meaning 'on the fire, into the fire' [rather mysterious here is PC **šə-bLa* 'thunder, lightning, god of thunder and lightning': is **š-* here a result of special dissimilative development before the following lateral?];

Abkh. **č̣^wa* 'thin' : PC **-č̣a* in **p̣əa-č̣a* 'thin' : Ub. *p̣əa* id. (note here the same front reflex in Ubykh as in the correspondence to Abkh. **ž^wa*; this is why this comparison is both semantically and phonetically preferable to Chirikba's, who compares (p. 248) the Abkh. and PC forms with Ub. *ač̣a* 'wide and flat');

Abkh. **ž^wa* 'side, rib' : PC **-Ła* in **ca-Ła* 'rib' : Ub. *ža-* 'beside'.

Abkhaz here has labialised back affricates; Circassian — either specific velar (or lateral?) reflexes **x*, **Ł*, or palatalised back **č̣*. This suggests that yet another rather enigmatic WC correspondence should be placed within the same series:

Abkh. **ẓ̌^wəla* 'seed; kin, clan' : PC **č̣əLá* 'seed; village' : Ub. *ẓ̌əjá* 'seed'.

In the first and fourth of these examples Chirikba (p. 270–271) follows [NCED] and reconstructs lateral labialised **λ^w* (declaring it, however, "an irregular correspondence") and lateral labialised palatalised **λ̣^w*. It is, however, easy to notice that they are distinguished not so much by palatalisation as by tenseness (PC **xə* vs. **č̣əLá*); here Chirikba fails to notice the obvious homogeneity of all the four etymologies.

I reconstruct here PWC palatalised labialised laterals (**λ̣^wə* 'six', **λ̣^wəla* 'seed', **λ̣^wa* 'thin' and **Ł^wa* 'rib, side').

Here again in three out of four cases we have reliable EC parallels with lateral affricates, not with back or front sibilants: cf. **?rānλ̣E* 'six' [NCED: 219], **Hīλ̣īwV* 'root, seed' [NCED: 571] and **=iλ̣īV* 'thin' [NCED: 639–640].

There is, therefore, no $*\check{z}^w$ in Chirikba's system: what he reconstructs as $*\check{z}^w$ is $*\check{z}^w$, and $*\check{z}^w$ should be reconstructed where he reconstructs $*\check{z}$ (see above).

PWC $*\check{z}^w > \text{PC } *\check{z} : \text{Ub. } \check{z}^w : \text{Abkh. } *\check{z}$

This phoneme is reconstructed only in one root, the WC word for 'silver' (PC $*tə\check{z}ənə$, Ub. $da\check{s}^wanə$, Abkh. $*ra\check{z}ənə$). This is a rather obscure case (see the discussion in [NCED: 514]) which hardly deserves a special phoneme in PWC — especially since the correspondence does not fit into any of the established systematic rows.

In Chirikba's system a palatalised labialised $*\check{z}^w$ is especially strange because the author does not reconstruct $*\check{c}^w$, $*\check{c}^w$ etc. On my reconstruction of palatalised labialised back affricates see below.

PWC $*\check{c} > \text{PC } *\check{c}, *\check{c} : \text{Ub. } \check{c} : \text{Abkh. } *\check{c}$

With nine examples this seems at first to be a representative correspondence. Let us, however, look at the examples closer.

№ 2 — the word for 'camel' — is certainly a borrowing. Even though the immediate source of PC $*ma\chi^{(w)}\check{c}a$ 'camel' is unknown, the Ubykh and Abkhaz forms are most certainly borrowed from Circassian (this is additionally proven by the irregular correspondence $-\chi- : -\chi-$ in PC $*ma\chi^{(w)}\check{c}a : \text{Abkh. } *ma\chi\check{c}A$).

№ 7 involves only Ubykh and Abkhaz and fits nicely, as we have seen above, into the row of correspondences for PWC $*\check{c}^w$ (see p. 713). The same is actually true for № 9 — where Chirikba has omitted the PC form $*\check{c}ə-ħa-$ 'roll, wind, wrap' — which shows that this is an entirely different correspondence.

In № 5 Chirikba produces a PC form $*a\check{c}a-$ in $*a\check{c}a-x^wə$, $*a\check{c}a-p\lambdaə$ 'sorts of millet', corresponding to Abkh. $*\check{c}a-\text{ŋ}^wə-ra$ 'harvest; bread'. Kuipers [Kuipers 1975] does not list the word. In [Керашева-Хатахов 1960] we find the Shapsugh form $\check{a}\check{s}a-fə$ 'sort of millet'; its correspondence to Kab. $\check{a}\check{s}a-x^w$ 'mogar (a millet-like plant)' [Карданов 1957: 21] gives us the PC reconstruction $*a\check{c}a-x^wə$ with $*\check{c}$, not $*\check{c}$. Therefore if we have indeed a correspondence between PC $*a\check{c}a$ and Abkh. $*\check{c}a-$, this is one more case of PWC $*\check{c}^w$, see above (with the regular correspondence PC $*\check{c} : \text{Abkh. } \check{c}$).

№ 4: PC $*\check{c}ə-$ ($/*\check{c}a-$) 'to run' is compared by Chirikba with Ub. $\check{c}a-$ 'to fall (of heavy objects)' (?) and with Abkh. $*\check{c}\check{c}a-$ 'to flow (of water)'. This is all

semantically rather dubious. The PC form is best compared with Ub. *ka-č̣a-* 'to walk uncertainly' (see below, including the discussion of the Abkhaz parallel for the root). Abkh. **čča-* 'flow, fall (of water)' can indeed be compared with Ub. *ča-* 'fall (of heavy objects)', but that brings us again to a reflexation typical for **č̣w*.

№ 6: PC **ača* 'billy-goat' and Abkh. **ča* 'female deer', **ča-cʷə* 'male deer'. The Abkhaz word is rather to be compared with Ub. *žʷa* 'deer, female deer'. Semantically the match is certainly better, although phonologically it is also somewhat dubious. We shall see below that Abkh. **č* is a regular descendant of PWC **č̣w*, while Ub. *žʷ* normally goes back to **ẓ̌w*: this may therefore be a case of old voice variation (**č̣wə* / **ẓ̌wə*, similar to **č̣wə* / **ẓ̌wə* in 'brother', but with additional fricativisation in Proto-Ubykh). But even if the match Abkh. **ča* : Ub. *žʷa* is incorrect, the Circassian and Abkhaz word still have quite different external parallels (for the former cf. PEC **ʔejžwē* 'goat' [NCED: 245], for the latter — PEC **čwēnʔV* 'game, wild animal', [NCED: 350]).

№ 8 (Ub. *čačʷə* : Abkh. **čačʷa* 'mug') is irregular both in Chirikba's and in my system, and can reflect an old variation in labialisation / palatalisation (Ub. *čačʷə* presupposes **č̣wəčʷV*, but Abkh. **čačʷa* can only go back to **čačʷV*).

№ 1 (PC **čə* 'horse' : Ub. *čə* : Abkh. **čə*) is a well known parallel but violates the correspondence proposed by Chirikba (he has to say that 'the palatal character of *č̣* in the Ubykh name of horse must be secondary and can be explained by the influence of the Shapsygh form *čə* 'horse' — which is extremely dubious). This is, in fact, one of a whole series of roots with the correspondence "PC and Abkh. back non-palatalised affricates : Ubykh back palatalised affricates"). Cf.:

PC **čə* 'horse' : Ub. *čə* : Abkh. **čə* id.;

PC **čə* 'brother' : Ub. *žə-lá* id.;

PC **čə-ʔə* / **čə-ʔə* 'cold' : Ub. *čə* id.;

PC **čə-* / **ča-* 'run' : Ub. *-čə-* in *ka-č̣a-* 'to walk uncertainly' (in Abkh. one could compare **žžə-* 'to overflow', which is, however, somewhat uncertain semantically);

PC **-pč̣ə* in **kʷə-pč̣ə* 'sickle' : Ub. *pč̣ə-* 'to mow, hew';

PC **č̣ərə* 'steel' : Abkh. **žərə* id.;

PC **č̣ə-* 'to cut, cut off' : Abkh. **žə-* 'to dig';

PC **žə* 'mouth' (probably with secondary deglottalisation) : Ub. *č̣ə* : Abkh. **č̣ə*;

PC **ʔwə-č̣ə-* 'to cut, hew' : Abkh. **č̣ə-* 'to hew, chop' [Chirikba — p. 245 — tries to add Ub. *č̣ə-* 'to lie (as grass after the rain)' as well, which is extremely dubious for semantic reasons];

PC *čVrək^wV 'turnip' : Ub. čárk^wa 'artichoke' (cf. also Tap. črək^wa 'turnip', which, however, may be borrowed from Circassian).

Since we have already reconstructed PWC plain back affricates (*č etc.), palatalised back affricates (*č̣ etc.), and labialised back affricates (*č^w etc., see above), here we have only one choice: to reconstruct palatalised labialised back affricates (*č^wə 'horse', *č^wə / *č̣^wə 'brother', *č^wə (/ *č̣^wə) 'cold', *č^wa- 'run', *pəč^wa 'sickle', *č^wəra 'steel', *č^wə- 'to cut, dig', *č^wa 'mouth', *č^wa 'cut, hew', *č^wəraək^wV 'turnip'). An additional proof is the variation *č^w- / *č̣^w- in *č^wa 'deer' (see above: the early fricativisation here helped preserve labialisation in Ubykh, where the normal reflexes of fricatives *š^w, *ž^w are š^w, ž^w with labialisation), as well as the external parallels which in most cases show labialisation (cf. PEC *hi[n]čwī 'horse' [NCED: 520–521]; *čwErHV 'cold' [NCED: 393–394]; *hilčwĒ 'run' [NCED: 490–491]; *čwVlHV 'cheek, mouth' [NCED: 396]).

Note that here, as in the case of most other back and lateral affricates, the PC tense *č shows a voiced counterpart in Abkhaz (*ž or *ẓ̌), which separates it from lax *č (= Abkh. *č) and once again proves the phonemic status of tense consonants in PWC.

All of this discussion leaves us with a single example of the correspondence PC *č : Ub. č : Abkh. *č, i. e. № 3: PC *-n-ča 'privative suffix' : Ub. -čə id. : Abkh. *čə- 'weak'. Even if the Abkhaz word is related (the analogy between Ub. psa-qa-čə 'weak, feeble' and Abkh. *psə-čə 'weak' is rather convincing), in PC we may deal with an irregular development within an auxiliary morpheme: note that Temirgoy has two variants -nča and -ẓ̌a, indicating that -nča may be secondarily depalatalised < *-nč̣a, which would be a good match for Ub. -čə and Abkh. *čə- (PWC *č^w).

To sum up: there is not a single good example of the correspondence "PC *č, *č̣ : Ub. č : Abkh. *č" as proposed by Chirikba.

PWC *č̣ > PC *č̣, (*č̣) : Ub. č̣ : Abkh. *č̣

The correspondence *č̣ : *č̣ : *č̣ is fine (just as *ẓ̌ : *ẓ̌ : *ẓ̌, see above); on the reconstruction of *č̣ here see [NCED: 182]. I would also agree with most of the examples (except for Chirikba's removing PC *č̣xə- 'laugh', obviously equal to Ub. ṣ̌wāč̣a- id., Abkh. *č̣əč̣a- < *ṣ̌əč̣a- id. and replacing it by PC *č̣əč̣a- 'to neigh' — which is rather dubious and does not have any effect on the reconstruction of *č̣ anyway).

Rather strange, however, is the parenthesised *č̣ in PC. The author does not list a single example with PC *č̣ — which is understandable because

there is none. Instead, we have several cases of PC *č̣ corresponding to Ub. *č̣ and Abkh. *č̣, cf.:

PC *kʷa-pč̣á- 'dark grey' : Ub. kʷə-pč̣a- 'to get rusty' : Abkh. *ɣʷa-bəẓ̌a 'dark grey, brown';

PC *pč̣ə 'pike, lance' : Ub. č̣a- 'stake, pole' (in compounds);

PC *pč̣ana 'goat' : Abkh. *ẓ̌ama id.;

PC *pč̣V- 'plane-tree' : Abkh. *ẓ̌ə 'oak-tree'.

Chirikba (p. 337–338) tries to explain these cases by assuming secondary voicing *pč̣- > *bẓ̌- in Abkhaz, but fails to explain why this voicing is always accompanied by "intensifying" in Circassian. In my view, this is a very normal case of a regular correspondence:

PWC *č̣ > PC *č̣ : Ub. č̣ : Abkh. *č̣

As I have noted several times, in Abkhaz the original tense consonants in back affricate rows regularly become voiced — which is exactly what we observe in this case.

PWC *č̣ʷ > PC *ṣ̌ : Ub. ? : Abkh. *č̣ʷ

See above (p. 716) the arguments in favour of tracing all cases of Abkhaz *č̣ʷ, *č̣ʷ etc. back to original lateral labialised palatalised consonants. The only root given by Chirikba as reflecting *č̣ʷ is Abkh. *č̣ʷə : PC *ṣ̌əbLa 'lightning, god of lightning', which is one of the cases considered in that section.

PWC *č̣ > PC *č̣, *č̣ : Ub. č̣ : Abkh. *č̣

Here we again observe an unmotivated split: PWC *č̣ > PC *č̣, *č̣. It is easy to see that all the cases with PC *č̣ actually conform with the correspondence PC *č̣ : Ub., Abkh. č̣ that I have formulated above, and that indicates PWC *č̣ʷ. These are examples 6 through 9.

In (1) we actually have Ub. č̣ (č̣a 'mouth') corresponding to Abkh. *č̣ (*č̣a id.) which is irregular according to Chirikba himself (he says: 'the palatalised character of the affricate in Ub. č̣a 'mouth' is probably secondary' (?)), yet in fact represents quite a regular case of PWC *č̣ʷ (see above).

In (2) (Ub. č̣a 'good' : Abkh. č̣a-ja id.) the correspondence is again irregular according to Chirikba's own rules (he says: 'the affricate in CA *č̣a-ja has apparently lost glottalisation'); Ub. č̣a should be rather compared

with PC $*\check{c}a$, Abkh. $*\check{c}a$ 'new, young, fresh' (Chirikba's example № 4) — and this again is a perfectly regular case of PWC $*\check{c}^w$ (see above):

(3) (PC $*\check{c}^w a$: Abkh. $*\check{c}a$ 'hew, chop') is a good case of PWC $*\check{c}^w$ (see above).

Finally, in example (5) (Ub. $\check{c}a$ 'press, squeeze' : Abkh. $*ra\check{c}a\check{c}a$ 'squeeze') there is no Circassian reflex, while the Ub.-Abkh. correspondence is again a good case of PWC $*\check{c}^w$.

In this case, too, it is quite evident that no correspondence like "PC $*\check{c}$: Ub. \check{c} : Abkh. $*\check{c}$ " exists in WC languages.

PWC $*\check{c} > \text{PC } *c : \text{Ub. } \check{c} : \text{Abkh. } *c$

Just as $*\check{z} : \check{z} : *z$ (PWC $*z$) and $*\check{c} : \check{c} : *c$ (PWC $*c$) this is a well established correspondence and reconstruction [NCED: 182], and I do not have any objections except for some minor etymological points (e. g., Ub. $\check{c}a$ 'cold' belongs rather to PC $*\check{c}a\text{-}za$ / $*\check{c}a\text{-}za$ id., see above, than to PC $*\check{c}a$ 'winter' — these roots in PC should be strictly kept apart).

PWC $*\check{c}^w > \text{PC } *c : \text{Ub. } \check{c} : \text{Abkh. } *c^w$

This correspondence (based on one word: 'thin') was dealt with above (p. 716), where I tried to show that it in fact represents PWC lateral $*\check{c}^w$; see also above for the arguments that in this row of correspondences Ub. has not \check{c} ($a\check{c}a$ 'wide and flat'), but \check{c} ($p\check{c}a$ 'thin'), which Chirikba for some reason "finds less plausible".

I hope to have shown above that the system of affricates reconstructed by Chirikba does not account for a huge amount of cases and should be in fact rewritten completely. We find abundant evidence in Western Caucasian languages for reconstructing two rows of affricates with complete distribution of the features of palatalisation and labialisation, namely:

$*c$	$*c$	$*z$	$*c$	$*\check{c}$	$*\check{c}$	$*\check{z}$	$*\check{c}$
$*c$	$*c$	$*z$	$*c$	$*\check{c}$	$*\check{c}$	$*\check{z}$	$*\check{c}$
$*c^w$	$*c^w$	$*z^w$	$*c^w$	$*\check{c}^w$	$*\check{c}^w$	$*\check{z}^w$	$*\check{c}^w$
$*c^w$	$[\check{c}^w]$	$*z^w$	$*c^w$	$*\check{c}^w$	$*\check{c}^w$	$[\check{z}^w]$	$*\check{c}^w$

Fricatives

1. Labial fricatives : *f

Rather surprising is Chirikba's reconstruction of PC *f (p. 116), based on a single Adyghe word *ča-fafa-čə* 'to flutter', without a Kabardian correspondence. It is well known that the only source of Ad. f is PC *x^w, which makes formulating the correspondence as PWC *f > PC *f : Ub. f : Abkh. *f seem rather strange (in [NCED] I reconstruct: PWC *f > PC *x^(w) : Ub. f : Abkh. *f). Other objections: in the root for 'smell' I prefer to reconstruct *b^w (see above), comparing not the isolated Shapsygh *fa-ma*, but the Common Circassian **ba-ma* 'smell'; for PWC *fV 'eat' cf. also PC **č-xa-* in **č-xa-* 'eat'.

2. Sibilant fricatives

In the system of fricatives Chirikba reconstructs more distinctions than in the system of affricates. Thus, he reconstructs an opposition between labialised front fricatives (*s^w, *z^w) and labialised middle fricatives (*š^w, *ž^w) as well as between labialised back fricatives (*š^w, *ž^w) and labialised palatalised back fricatives (*š^w, *ž^w). Unlike the system of affricates, this one seems more similar to my reconstruction presented in [NCED]; a closer inspection, however, reveals a lot of differences that are to be discussed.

PWC *z > PC *z, Ub. z, Abkh. *z

This is the same correspondence as in [NCED: 181] (with a minor difference: I think that in Ubykh we have to acknowledge a variation between z and ʒ; for examples see above, p. 709).

PWC *z^w > PC *ž : Ub. ž : Abkh. *ž^w

This is a completely new correspondence and reconstruction (Chirikba's labialised front consonants do not correspond to mine) and it is based on two examples. One of them is PC *žV- : Ub. *až-qa* 'right (side)'; Chirikba omits the Abkhaz counterpart — which is, as a matter of fact, not *ž^wa, but *aža 'right'.

PC *žə, Ub. *ža* 'to comb' is compared by Chirikba to Abkh. *ž^wa 'to scutch, swingle, tear in pieces'. However, here we have a perfect match (just like in the case with 'right') with Abkh. *ý : Abkh. **ýa-* 'to scrape' (see the discussion in [NCED: 495]).

Thus in both cases we have quite a different correspondence: PC *ž : Ub. ž : Abkh. *ý, where *z^w is rather hard to reconstruct. Other examples:

PC *bžā 'bee' : Ub. *bžā-mla* 'hornet, big wasp' (Chirikba, p. 255 compares the Ub. word with Abkh. *bəžə-bəžə 'to say lies' (?));

PC *žə 'wind, air' : Abkh. *ýə 'swift';

PC *bžə 'stateliness' (in *bžə-s^wa, *bžə-č^wa 'stately', *bžə-k^wa 'unstately') : Ub. žə- 'to put on flesh', a-ž-qa 'fat, corpulent' : Abkh. *yaya- (probably assimilated < *ýa-ya-) 'branchy, spacious; fat, plump (of man)' (Chirikba, p. 255 compares Ub. žə- — without mentioning the PC form — with Abkh. *-žə suffix meaning 'awkwardly excessive' — which is rather dubious).

For this correspondence I have reconstructed PWC *ý (for a discussion of Chirikba's *ý see below).

PWC *s > PC *s : Ub. s : Abkh. *s

No objections in this case (the correspondence is identical to the one in [NCED: 181]).

PWC *s^w > PC *s : Ub. š^w : Abkh. *ś

Note that the reflexes of *z^w and *s^w in Chirikba's system are completely different (*ž : ž : *ž^w vs. *s : š^w : ś), which suggests that they are actually heterogeneous.

In fact, here (as well as in some other cases) Chirikba confuses three different sets of correspondences: a) PC *s : Ub. ś : Abkh. *ś (where I reconstruct *ś); b) PC *s : Ub. s : Abkh. *ś (where I reconstruct a back fricative *š, see above on the reconstruction of *č, *ž, *č); c) PC *ś : Ub. š^w : Abkh. *ś (where I reconstruct a front palatalised labialised fricative *ś^w — with palatalisation preserved in PC and Abkh. and labialisation preserved in Ubykh).

Let us look at the examples:

№№ 1, 2, 3, 6, 7, 8 involve only comparisons of Circassian and Abkhaz (PC *s : Abkh. *ś), without any Ubykh parallels — therefore, in these cases one can reconstruct either *ś or *š. In fact, in №6 (PC *sa 'swim' : Abkh. *ʒa-śa id.) there is an Ubykh parallel, omitted by Chirikba, which is Ub. ʒa-śa- 'swim' where nothing like -š^w- is actually present (the root clearly should be reconstructed as *śa).

№№ 9, 10, 11 involve only comparisons of Ubykh and Abkhaz (Ub. š^w : Abkh. *ś) without Circassian parallels; one can therefore safely reconstruct *ś^w.

This leaves us with just two rather dubious cases:

(4) PC **sa* 'sabre, knife' : Ub. *ašwa* 'sickle' : Abkh. **aša* 'sword'. Here Chirikba himself proposes an alternative etymology: Ub. *ašwa* 'sickle' : Abkh. **ašwa* 'to weed' (PWC **ašwa*). We are left with PC **sa* : Abkh. **aša* that again points either to **ś* or to **š*.

(5) PC **cə* 'hair, wool' : Ub. *dašwə* : Abkh. **laša* 'wool'. The Circassian parallel here (suggested by Abdokov: **cə* < **Tsə*) is very dubious. The Ubykh and Abkhaz forms as such point again to PWC **św*; even if the Circassian form belongs here, one has to suspect a secondary deformation of the fricative within the newly formed cluster **Ts* (**Tś*). (Note that Chirikba's discussion of the initial consonant here is completely meaningless: no development **r-* > **l-* had ever taken place in Proto-Abkhaz; related East Caucasian forms do not show any "fluctuation" in the anlaut consonant, but correspond perfectly well to each other, going back to **lāswĕ* [NCED: 743]; Darg. *dus* and Tab. *dis* 'wool, fleece' do not exist, and the Lezg. form is not *jus*, but *jis*; Tsakh. *jis* means not 'goat skin', but 'goat wool'; Av. *ras*, Godoberi *ras* do not correspond to Lezg. *jis* and Tsakh. *jis* that go back to a different root, PEC **hālśV* [NCED: 500].)

We can see that neither **z^w* nor **s^w* that Chirikba reconstructs for PWC are valid phonemes. In reality one can safely reconstruct **z^w* and **s^w* where Chirikba reconstructs **ž^w* and **ś^w* (see below). PWC lacked a distinction between 'front' and 'middle' sibilants which Chirikba is willing to project into the Common WC stage: this is an excessive feature and the whole PWC system is sufficiently well explained by postulating the opposition of front and back affricates / fricatives as well as the features of labialisation and palatalisation.

PWC **ž* > PC **ž* : Ub. *ž* : Abkh. **ž*

One more example of an elegant but non-existent correspondence. Chirikba's evidence is:

PC **žaza* 'slow, lingering' : Abkh. **žaza* 'dullish, slow'. Since there is no Ubykh parallel, it may as well be a case of the correspondence "PC **ž* : Ub. *ž^w* : Abkh. **ž*", for which [NCED: 182] I reconstruct **ž^w*. Chirikba is quite right in saying that "Ashkh. *ž^važ^va* is a borrowing, as Kab. *ž* in loans is usually rendered by Ashkh. and Tap. *ž*" (p. 255). But this very fact is quite eloquent: in reality, the phoneme *ž* in PC always goes back to labialised **ž^w* or **ž^{św}*, and the fact that relatively recent Abaza loans from Circassian preserve the labialisation show that it disappeared at a very late stage. The Ashkh. borrowing *ž^važ^va* is, therefore, a good clue for us to reconstruct **ž^w* in this root;

PC **ža-* 'tuberculosis, consumption' : Ub. *ža-ḡa* 'illness' : Abkh. **žə-ḡa* 'plague, sickness'. See above (p. 705) about the root **žV* 'ill' (> PC **wə-za*, Ub. *ža-ḡa*, Abkh. **čə-ma-za-*). Abkhaz **žə-ḡa* may, in fact, correspond to PC **ža-*, but I think that Kuipers [Kuipers 1975: 28] is right in explaining the root here as 'roast, be scorched' (PC **žə-* / **ža-*). The latter normally corresponds to Abkh. **žə-* 'roast, bake' (and **žə-ḡa* may well be a result of the rather frequent variation in fricativity) and Ub. *žwa-* id. < PWC **žwa* 'roast, bake, scorch'. There may have been some secondary interaction between the two roots (**žV* and **žwa*), but in general they are quite distinct;

PC **žəžəja* : Ub. *žāža* 'kidney'. Both Ub. *žāža* and *žəžəja* are most certainly borrowed from Circassian: the genuine Ubykh word for 'kidney' is *čāčā*, corresponding perfectly to Abkh. **čāčā* id. Since *-žəja* in PC is a normal diminutive suffix, we may think of an irregular development in PC: **čāčā-žəja* > **čā-žəja* > **žəžəja* through assimilation;

PC **-žkə* 'husk' : Ub. *žkəžkəžka* 'the sound of turning of the mill-wheel'. An obviously onomatopoeic — and even so, quite dubious from a semantic point of view — comparison;

Ub. *bžā-mla* 'hornet, big wasp' : Abkh. **bəžə-bəžə* 'to say lies'. Very dubious semantically; cf. also a far better match for the Ubykh form in PC **bžā* 'bee' (< PWC **bəja*);

Ub. *žə-* 'to become fat, put on flesh', *a-ž-qa* 'fat, corpulent' : Abkh. **-žə* suffix with the meaning 'awkwardly excessive'. A different etymology of the Ubykh form (presupposing PWC **j*) see above, p. 723.

In my system PWC **ž* is reconstructed for the correspondence "PC **z* : Ub. *ž* / *ž* : Abkh. **z*" which is refuted by Chirikba. Examples (PWC **məža* 'prickle, pine'; PWC **žV* 'ill'; PWC **pəžV* 'clean') see above, p. 709. In PC and Ubykh the development of **ž* is quite consistent with the rest of the palatalised front affricates and fricatives (which are preserved as "middle" sibilants in Ubykh but yield plain front sibilants in PC); in Abkhaz the development is exceptional (other palatalised sibilants usually yield "middle" sibilants, just like in Ubykh), but the row of correspondences still fits rather nicely into the general pattern of development of the PWC palatalised sibilants.

PWC **žw* [**zʷ*] > PC **zʷ* : Ub. *zʷ* : Abkh. **zʷ*

This row of correspondences is quite correct — except for its interpretation. Chirikba reconstructs here "middle" labialised **žw*, while I treat it as reflecting just plain front labialised **zʷ*. In my system the palatalised labialised **žw* is reconstructed for quite a different set (PC **ž* : Ub. *žʷ* : Abkh. **žʷ* / **ž*,

cf. PWC **ž*^wV 'to roast, bake', PWC **ž*^wə 'kid', PWC **bžž*^wa 'horn, hoof', PWC **ž*^wa^ž^wa 'slow' — see above, pp. 724).

PWC **ś* > PC **ś* : Ub. *ś* : Abkh. **ś*

This correspondence deserves the same analysis as **ž* : *ž* : **ž*. Here we have, in fact, a confusion of several heterogeneous correspondences ('combed' by Chirikba and made to look like an elegant match of identical phonemes).

№ 5 (PC **k*^wə^śa 'cradle' : Abkh. **k*^wa^śə-*k*^wa^śə 'go at a jog-trot') is a very dubious parallel and was refuted above (p. 691) because of the irregular correspondence **k*^w : *k*^w.

In № 4 (PC **ś*a : Abkh. **ś*ə 'weave'), № 5 (PC **ś*ə-na : Abkh. **ś*ə- 'lamb'), № 7 (PC **-ś*a : Abkh. **-ś*a- in body parts), № 12 (PC **ś*a-*ś*a 'crumble' : Abkh. **ś*a-*ś*a 'small, mince') we have no Ubykh parallels: the correspondences, therefore, fit well into the row "PC **ś* : Ub. *ś*^w : Abkh. **ś*" where I reconstruct PWC **ś*^w [NCED: 182].

№ 8 (Ub. **pś*a- 'swell' : Abkh. **pś*ə-la 'fat') is, indeed, a case of PWC **ś* — however, here Chirikba (as often) omits the Circassian parallel which is PC **Pś*ə-ta- 'to swell' (cf. also **Pś*a-s^wə 'pregnant (of animal)') and has **s* instead of **ś* (thus agreeing with my correspondence in [NCED: 181]).

The same is true for № 10 (Ub. *mś*a 'call, read' : Abkh. **mś*ə 'to swear'), although here the comparison itself may be wrong. The Ub. form should rather be compared with Abkh. **pə*́^xa- 'call, read' < PWC **pə*́^xa with an entirely different phoneme. [The probable PC match here is rather complicated: one would expect a **ś* < **č*, but in reality we have a variation **pś*ə- / **pś*ə- in Ad. *pś*ə-sa, Kab. *pś*ə-s 'tale'; this is probably due to dissimilations with the second part of the word].

We can also safely reconstruct **ś* for № 11 (Ub. -*ś*a gerundial suffix : Abkh. **-ś*a adverbial suffix) — but there is no PC parallel with a **ś* here either.

№ 2 is a rather complicated case. The standard form of the PC interrogative pronoun 'what' is **s*ə- (Ad. *sə*-da, Kab. *sə*-t) and it corresponds nicely to the standard Ub. *sa* 'what' (as well as to PEC **sā*j 'what' [NCED: 958]) and allows us to reconstruct PWC **s*V. Dialectal forms in Adyghe (Bzhed., Shaps. *ś*ə-də) are still unexplained (the correspondence within Circassian is absolutely irregular) and may reflect either an irregular development within an auxiliary morpheme or an entirely different original root contaminating with **s*V. In any case it is quite risky to base any reconstruction on evidently irregular and exceptional evidence.

Instead of 12 examples we thus have only 3 demonstrating Chirikba's rule (*ś : ś : *ś):

(1) PC *wə-śa 'to stuff, fill, beat, crush' : Ub. śaśə- 'to beat, pound, crash' : Abkh. *śə- 'to hit, beat'. The attribution of the PC form here is not quite clear: it may rather belong together with Abkh. *šwa 'destroy, dismantle' (although *swa can also be reconstructed, the Bzyp form being unknown). The actual relic of the root corresponding to Abkh. *śə- is rather found within the exact match of Abkh. *gwa śə- 'to take offence' (lit. 'hit the heart') : PC *gwa-sa- id. Thus again here we have the correspondence "*s : ś : ś";

(9) PC *pśaśa 'girl' : Ub. śasa 'bride'. This is originally a root with two different fricatives, subject to various assimilations: cf. in Ubykh also the variant sasá, in Ad. — sās (see the discussion in [NCED: 969]);

(3) PC *pśə 'get tired' : Ub. pśa-xwə- 'breathe' : Abkh. *pśə- 'die'. This is the only unobjectionable example of the correspondence "*ś : ś : *ś". Ubykh should regularly have šw (< *św) here, and the irregular reflex must be explained by an early dissimilative delabialisation (*pśśwa-xwə- > *pśśa-xwə > pśa-xwə-; [NCED: 961]).

To sum up: instead of Chirikba's 'ś : ś : ś' we in fact have two different sets of correspondences:

a) PWC *ś > PC *s, Ub. ś, Abkh. *ś (cf. *pśV 'swell', *śa 'gerundial suffix', *śV 'beat, hit' above, as well as *śa 'swim', see p. 723); cf. also: PC *-sa 'think' (in *Psə-sa-) : Ub. śa- id.; Abkh. *čəśə 'young, child' : Ub. čəśə id.;

b) PWC *św > PC *ś, Ub. šw, Abkh. *ś (cf. *śwV 'weave', *śwə 'lamb', *śwəśwə 'crumble, mince' above, as well as *laśwV 'wool', see p. 724); cf. also: Ub. šwa- 'shear, shave' : Abkh. *śa- id.; Ub. pχašwə 'woman' : Abkh. *pəhwaśə id.

PWC *św [*sw] > PC *sw : Ub. sw : Abkh. sw

Just like with its voiced counterpart (see above, p. 725) this correspondence is quite correct. I reconstruct here PWC *sw; for the reconstructed *św in my system see the argumentation above.

PWC *ž > PC *ž : Ub. ž : Abkh. *ž

This is one more fictitious correspondence.

From the etymology № 1 (PC *ža 'sleigh' : Ub. ža 'block, log' [see p. 714 above]) one should remove Abkh. *(a)ža 'ash-tree' — which corresponds fairly well to Ub. žwa 'willow, osier' (< PWC *lwa, see below). We are left with two examples of PC *ž : Ub. ž and two examples of PC *ž : Abkh. *ž,

without a single case of $*\check{z} : \check{z} : *z$. Chirikba also adds (under the heading "irregular correspondence") two cases of PC $*\check{z}$ corresponding to Ubykh \check{z} .

In reality there are two different sets of correspondences:

a) PWC $*\check{z} > \text{PC}$, Abkh. $*\check{z} : \text{Ub. } \check{z}$. Cf.:

PC $*b\check{z}a-3a$ 'flea' : Abkh. $*b\check{a}\check{z}a$ 'beetle' (№ 3 in Chirikba's $*\check{z}$);

PC $*\check{z}aq^wa$ 'belch' : Abkh. $*\check{z}ah^wa$ 'chew the cud, ruminant' (№ 4 in Chirikba's $*\check{z}$);

PC $*g^wa-b\check{z}a-$ 'become angry' : Ub. $\acute{g}a-b\check{z}a-$ id., $c^wa-b\check{z}$ 'mistake, sin' : Tap. $g^w-b\check{z}a-ra$ 'distress, anxiety', $b\check{z}a-ra$ 'defect, fault' (Chirikba lists the PC-Ub. match in his "irregular correspondence", but transfers Ub. $c^wa-b\check{z}$ to a different etymology — see below — and omits the Tapanta parallel);

PC $*b\check{z}a-ha$ 'autumn' : Ub. $b\check{z}a$ 'winter' ("irregular correspondence", according to Chirikba).

Below I intend to show that no correspondence like $*\check{z} : \check{z} : *z$ exists in Western Caucasian languages (again pace Chirikba's fictitious correspondences). Original palatalised back fricatives were preserved in Ubykh, but (unlike affricates) underwent depalatalisation in PC and Abkhaz. The listed examples thus reflect regular PWC $*\check{z}$.

b) PWC $*\check{z}^w > \text{PC}$, Ub. \check{z} , Abkh. (?) $*\check{z}$

Cf. $*\check{z}^wa$ 'log' and $*\check{z}^wa-$ 'to wait, endure' on p. 714.

The Abkhaz reflex $*\check{z}$ is somewhat dubious here. By analogy with $*\check{z}^w > *s$ something like $*\check{z}$ would be expected, but the only example is Abkh. $*\check{z}a-$ 'to endure', and I have to list the reflex $*\check{z}$ (with a question mark) in [NCED: 182].

As for the original PWC $*\check{z}$, this phoneme (like all other plain back sibilants) changed to a front $*z$ in Ubykh and Circassian, but to a 'middle' $*\check{z}$ in Abkhaz (cf. $*\check{z}a$ 'gall', $*\check{z}a-$ 'reciprocity prefix', $*\check{z}V-$ 'gather' on p. 707).

WC $*\check{z} > \text{PC } *z : \text{Ub. } \check{z} : \text{Abkh. } *z$

Let us look at Chirikba's data for this correspondence:

(1) PC $*b\check{z}a-ka$ 'grease-stain' : Ub. $c^wa-b\check{z}$ 'mistake, sin' : Abkh. $*b\check{z}a-xa-$ 'corrupt, spoil'. This is a complete misunderstanding. PC $*b\check{z}a-ka$ is a regular derivate from $*b\check{z}a-$ 'to roast (on oil, grease)' (see [Шагиров 1977: I, 90]). The Ubykh form belongs together with Ub. $\acute{g}a-b\check{z}a-$ 'become angry' to PWC $*b\check{a}\check{z}a$ ($>$ Abkh. $*b\check{z}a-$, see above). Finally, Abkh. $*b\check{a}\check{z}a-$ 'spoil(ed),

corrupt' — since Abkh. *ž can only go back to PWC *l̥ — is best compared with PC *bLa in *ka-bLá 'hunger; crop failure' (lit. 'year failure');

(2) The second component in PC *čadā-bžā 'bellows' is unclear, and its comparison with Ub. bžā- 'to melt, fuse' is absolutely uncertain. In [NCED: 627] Ub. bžā- is compared with PC *zʷā- 'melt, thaw', with a supposition of secondary delabialisation in Ubykh, which is also not very secure;

(3) PC *jažā- 'to go, leave' : Abkh. *gažā- 'to turn round' — evidently a very weak match in semantics;

(4) PC *žā 'early' : Abkh. *ša-žā 'early morning'. The match looks superficially fine: however, in Abkhaz *ša-žā obviously goes back to *ša-žā as a result of assimilation (just like *ša-bāžā 'midday' goes back to the same *ša- 'day' + *bāžā 'middle'); *žā 'quick, young' can be found in Abkh. a-žā-čv 'young boy', a-žāʷ-hʷa 'quickly'. The correspondence is, therefore, irregular both in my system and in Chirikba's; one wonders if the PC form is not etymologically identical to PC *žā 'wind, air' (as 'quick movement', cf. the Abkhaz parallel *jā 'swift', see above, p. 723).

(5–6) The matches between PC *jažā 'ashes' and Abkh. *žā-jā 'smith', as well as between PC *bžā 'yoke' and Abkh. *bžā- 'to tame' are quite weak semantically.

It is not surprising that none of the 6 examples presented can be met in any of the etymological literature on WC languages: the matches are all semantically unreliable and were evidently invented just to demonstrate the non-existing correspondence "ž : ž : ž".

On my reconstruction of PWC *ž see above.

PWC *žʷ > PC *ž : Ub. žʷ : Abkh. *žʷ

This is a surprising correspondence. No PC forms at all are given (so where does Chirikba get the PC *ž from?). There are only two examples:

a) Ub. žʷa 'willow' : Abkh. *žʷa- 'to tear' (even Chirikba places a question mark here). The Ubykh form, as I have written above (p. 727), is a good match for Abkh. *žā 'ash-tree' (going back to *l̥ʷa, see below);

b) Ub. žʷā : Abkh. *žʷa 'ten'. This correspondence is quite exceptional, and the Circassian match is PC *pčā (not *pča, as cited in [Chirikba: 263]). The only explanation I can think of [NCED: 246] is a reconstruction of PWC *b-čʷā 'ten', with a regular development into PC *pčā, but with secondary voicing in Abkhaz and Ubykh. Ub. žʷā normally reflects *žʷā, but the Abkhaz reflex must have been *žā, changed to *žʷa under the influence of the neighbour numeral *zʷā 'nine' (the interaction between 'nine' and 'ten')

is not an unfrequent phenomenon — cf. Slavic **devětъ* 'nine' instead of **nevětъ* under the influence of **desětъ* 'ten' etc.).

Regardless of the way we treat the PWC root for 'ten' it is clear that nothing like the correspondence proposed by Chirikba actually exists. For my reconstruction of **ž^w* see above, p. 728.

PWC **ž^w* > PC **ž* : Ub. *ž^w* : Abkh. **ž^w*

This correspondence, based on just one example (PC **žə* : Ub. *ž^wə* : Abkh. **ž^wə* 'old') is, surprisingly enough, quite correct and exactly the same as in [NCED: 182]. I can add another example of the same correlation: PC **g^wə-žə* 'old hidden anger' : Ub. *gə-ž^w* 'revenge' : Abkh. **g^wə-(pə)-ž^wə* 'anger, hidden anger' (a compound with **g^wə* 'heart' in all three subgroups).

PWC **š* > PC **š*, **ṣ̌* : Ub. *š* : Abkh. **š*

This is an interesting case, with most examples superficially looking very convincing. One can quickly note, however, that the vast majority of Circassian parallels here has **ṣ̌*, not **š*, cf. **ma-ṣ̌a* 'hole', **(b)k^wə-(p)ṣ̌ə* 'millet-straw', **ṣ̌a* 'to ripen', **ṣ̌a* 'raw internal fat'. Out of these, moreover, several reveal different patterns of correspondences in Ubykh (for **ṣ̌a* 'fat', Abkh. **ṣ̌(ə)ṣ̌a* cf. Ub. *s^wə-qə* 'butter, fat'; for **(p)ṣ̌ə* 'millet-straw', Abkh. **pṣ̌ə* 'millet' cf. Ub. *pṣ̌ə* 'millet').

The only two examples with PC **š* are:

(5) PC **ša-kə* 'cloth, textile' : Abkh. **šə* 'white linen'. The Abkhaz word actually means 'white' (as a noun: 'white linen', 'wall-eye') and corresponds to PC **x^wə* 'white' (< PWC **λ^wə*). A much better match for the PC root is Abkh. **s^wə* 'to put on clothes';

(6) PC **šχ^wa* 'grey, blue; grass' : Ub. *šχ^wa* 'grass'. Both the PC and Ub. forms also mean 'poison' and correspond to Abkh. **q^wəs^wə* 'medicine, poison' (see above, p. 714).

We have, therefore, two clearly different (although similar) correspondences: a) PC **š* : Ub. *š* : Abkh. **s^w* (where I reconstruct **š^w*); b) PC **ṣ̌* : Ub. *ṣ̌* : Abkh. **ṣ̌* (where I reconstruct the tense correlate **š^w*). Again we see that Chirikba's ignoring the tense/lax opposition in PC leads him to incorrect results.

As for **š* proper, in my system it is reconstructed for the correspondence "PC, Ub. *s* : Abkh. *ṣ̌*" (see above, p. 723).

PWC *š̌ > PC *š̌, *š̌̃ : Ub. š̌̃ : Abkh. *š̌̃

Just like in the case with *ž̌, this correspondence is completely misleading. Let us look at the examples:

(1) PC *š̌a- locative prefix: Ub. š̌a- in š̌a-χa 'until'. A much better match is Ub. š̌a- locative prefix and root ('above'; 'inside');

(2) PC *š̌aš̌a- 'neigh' : Ub. š̌aš̌a- id. An onomatopoeic root, most probably borrowed in Ubykh from Circassian;

(3) The comparison of PC *š̌aš̌a- 'belong to, be a part of' (it is uncertain if *š̌ or *š̌̃ is to be reconstructed) with Ub. š̌a- 'be, become' belongs to G. Dumézil [Dumézil 1975] and is put under doubt by Shagirov [Шагиров 1977: II 108]. In [NCED: 663] I have proposed to compare Ub. š̌a- with Abkh. *xa- 'to become', thus reconstructing PWC *xV- (cf. further PEC *=ixA 'be, become');

(4, 5, 9) These are parallels between grammatical suffixes that often violate regular correspondences. All of them involve only parallels between Ubykh and Abkhaz (only in (9) the Adyghe ergative suffix -š̌̃ is for some reason compared with Abkh. *š̌a-wa-ka 'somebody' and Ub. ma-š̌a 'everybody' — a very dubious example altogether). Moreover, in (5) (Abkh. *-ja-š̌a 'suffix of imperative and request') one may suppose a secondary assimilation in palatalisation to the preceding -j- (*-ja-š̌a < *-jaš̌a which normally would be expected);

(6) Ub. š̌aš̌a- : Abkh. *š̌a- (*š̌aš̌a-) 'caress, stroke'. The Abkhaz word corresponds well to PC *la- 'to sharpen, whet; to stroke' and thus goes back to PWC *lV-; the Ubykh form can be an Abkhaz loanword;

(7) PC *pš̌a- 'to measure (dry substances)' : Ub. pš̌a- 'to measure'. Very probably a Circassian loanword in Ubykh;

(8) PC *pš̌a 'feudal prince; father-in-law' : Abkh. *apš̌a 'big, strong, great'. The Abkhaz word is only found as a second part of compounds and usually treated as pš̌a- 'red' (cf. a-zaarapš̌ 'terrible anger' = 'red anger', á-matapš̌ 'a very venomous snake' etc.). In Tapanta it is only attested in qabard-apš̌ 'the Great Kabarda'. It is thus rather probable that while in some cases it is actually = Abkh. *pš̌a 'red', in others it can represent a later loan from Circ. pš̌a (cf. especially the case with qabardapš̌).

Original *š̌, *š̌̃, just like *ž̌, have preserved their palatal nature in Ubykh, but were depalatalised in Abkhaz and Circassian. Cf.:

PC *š̌a-(pa)- 'to collect, pick up one by one', *š̌a-pχa 'measure, size, example', *š̌a-ta- 'to try out, check' : Abkh. *š̌a-š̌a 'deposit, pledge; hostage', *š̌a-ta- 'to spare (e. g. smb.'s life)';

PC *šə- 'to measure' : Ub. šə- 'to divide', šə 'part' : Abkh. *ša- 'to divide; to measure';

PC *(b)kʷə-(p)šə 'millet straw' : Ub. pšə 'millet' : Abkh. *pəšə id.

There is only one example of *š (which is not surprising, because in PC *š is an extremely rare phoneme), and two reliable cases of *š; however, the correspondences fit well into the overall scheme of development, and the reconstruction of *š and *š in these cases seems reliable.

PWC *šʷ > PC *š, *š : Ub. šʷ : Abkh. *šʷ

Just like its voiced counterpart *žʷ, also postulated by Chirikba (see above), this correspondence simply does not exist. Let us look at the examples:

(1) PC *ša- 'hunt', *ša-kʷa 'hunter' : Ub. šʷa-ka 'hunter' : Abkh. *šʷa-ra- 'hunt; wild animal'. Let me note at once that Ub. šʷa-ka is a mistake: Ubykh indeed has -šʷa in λa-šʷá 'hunting (adv.)' (where λa- = 'deer'), but the word for 'hunter' is sʷā-ká. Chirikba confuses two different roots here: (a) PC *ša- 'hunt', *ša-kʷa 'hunter' : Ub. sʷā-ka 'hunter' (= PC *ša-kʷa). This is a typical case of PWC *šʷ (in my reconstruction) which yields PC *š, Ub. sʷ and Abkh. *š. Another case of the same correspondence is: PC *ša 'fat', Abkh. *š(ə)ša, Ub. sʷə-qa 'butter, fat'; (b) PC *ša-hV 'deer' : Ub. λa-šʷa 'hunting' : Abkh. *šʷa-ra- 'hunting, wild animal'. This is a case of PWC *šʷ (in my reconstruction). Chirikba also reconstructs here *šʷ (see below), mercilessly extracting Tapanta šʷar 'wild animal' from the Common Abkh. root *šʷara- (/ *šʷarə-) and comparing it alone with PC *šaħa on p. 266;

(2) PC *ša-pχa 'measure' : Ub. šʷa 'price, to value' : Abkh. *šʷa- 'to measure (time, space)'. Ub. šʷa should rather be compared with Abkh. *šʷa- 'to pay' [NCED: 797], while PC *ša-pχa 'measure, size, example' is hard to separate from *ša-pa- 'collect, pick out one by one' and *ša-ta- 'try out, check', on the etymology of which see above;

(3) PC *šaɡʷə 'mountain top' : Abkh. *šʷəbə 'hoar-frost' (?). The etymology of *šaɡʷə (= Ub. šakʷa id.) see above, p. 714;

(4) Ub. məšʷə 'grapes' : Abkh. *lə-məšʷə 'clematis' is a good match, but would just as well fit into the correspondence "PC *š : Ub., Abkh. *šʷ", i. e. PWC *šʷ;

(5) Ub. šʷa-ča 'to laugh' : Abkh. *pə-šʷə-r-čəča-. This could also be a good parallel (with Ub. šʷ = Abkh. šʷ < PWC *šʷ, just like in the preceding case); unfortunately Abkh. *pəšʷə-rčəča- literally means 'to laugh with lips'

(Abkh. *a-pəš* 'lip'), while Ub. *š^wa-* = PC **-xə* in **č-xə* 'laugh' and goes back to PWC **ǰ^wV* (see above, p. 719).

As for the reconstruction of PWC **š^w*, **š̌^w* — see above, p. 730.

PWC **š̌^w* > PC **š̌*, **š̌̇* : Ub. *š^w* : Abkh. **š̌^w*

This is basically the same row of correspondences (and the same reconstruction) as for **š̌^w* in [NCED: 182]. There are, however, minor differences:

a) the unmotivated split into **š̌* and **š̌̇* in PC is based on one parallel (PC **waš̌̇* : Ub. *gaš^wa*, Abkh. **-g^waš^w* 'axe'), where PC **w-* is also irregular. PC **waš̌̇* is most probably borrowed from an Iranian source (Osset. *wäs*, Old Indian *vāśi-* [Абаев: IV]).

b) Chirikba proposes to connect PWC **š̌^wa-* 'deer' with PEC **chwōlē* 'fox' [NCED: 324], rejecting the quasi-homonymous PWC root **š̌^wV* 'fox, jackal' proposed ibid. He analyses Bzyp *a-š̌̇á-bga* 'red fox' as *aš̌̇á-bga* 'Abaza fox'. I do not know Chirikba's sources in this case; the recording *a-š̌̇á-bga* is present in Marr's dictionary (but unfortunately absent in [Бражбѣ 1964]). Cf. also Tap. *š̌^wa-gala* 'horde of wolves'.

c) This time Chirikba does not include in his correspondence the tense PC reflex. However, there exists a special correspondence of PC **š̌̇* to Ub. *s^w* and Abkh. **š̌̇* which it is natural to treat as PWC **š̌̇^w*. Examples (**š̌̇^wa* 'hunt', **š̌̇^wa* 'oil, grease') see above, p. 732. This is one more case of specific external parallels for PC tense consonants, again disproving Chirikba's thesis of their secondary origin in Circassian.

Obstruent laterals

Chirikba reconstructs a rather defective system of lateral affricates which includes:

<i>ǰ</i>	<i>ǰ̇</i>
<i>ǰ̌</i>	<i>ǰ̌̇</i>
<i>ǰ^w</i>	
<i>ǰ̌^w</i>	

Here he again tries to ignore the reconstruction presented in [NCED] without giving any particular reason (let me note, however, that the correspondences for **ǰ̌̇* and **ǰ̌̇̇* are just the same as in [NCED: 182]).

Above (pp. 711–712) I have given the reasons for reconstructing PWC **ǰ̌̇*, **ǰ̌̇^w* as well as labialised palatalised **ǰ̌̇̇^w*, **ǰ̌̇̇^w*, **ǰ̌̇̇̇^w* and **ǰ̌̇̇̇̇^w*. Let us now proceed

in filling the other gaps (and making corrections) in the PWC system of lateral affricates.

1. PWC * λ , * λ'

Chirikba (p. 269) reconstructs * λ for the following row of correspondences: "PC * \check{s} , \check{s} : Ub. \acute{s} : Abkh. * x ". He notes that I reconstruct a tense lateral fricative * λ here (although this is not quite correct: I reconstruct * λ for PC * \check{s} : Ub. \acute{s} : Abkh. * x , but * λ (a lax lateral fricative) for PC * \check{s} : Ub. \acute{s} (the Abkhaz reflex here would also be * x , but no examples are known). He, however, says: "I opt for an affricate here, as I don't reconstruct tense consonants, and because the affricate corresponds nicely to the affricate in Proto-Avar-Andi word for 'three'". This is unusual for Chirikba, who usually does not pay any attention to the EC parallels.

The EC argument, however, is of no value here, because PEC voiceless affricates usually give fricative reflexes in WC: cf. * $c > s$ ($\sim z$), * $cw > \check{s}^w$, * $\lambda > \lambda$, * $q > \chi$, * $qw > \chi^w$ [NCED: 45–58]; the only exceptions are when they are followed by long vowels (and thus give tense reflexes: * \check{c} , * \check{c}^w etc.), and the case with middle and back affricates (* \check{c} , * \check{c}) that are not fricativised. From within WC the correspondence " \check{s} , \check{s} : Ub. \acute{s} : Abkh. x " certainly looks like reflecting a fricative.

Moreover, there is a very good candidate for PWC * λ in the row

PC * \check{c} : Ub. \check{s} : Abkh. * x . Chirikba (p. 270) reconstructs here PWC palatalised * λ' . However, he fails to notice (or recognize, because it is stated in [NCED: 182]) another row of correspondences: PC * \check{c} : Ub. \check{s} : Abkh. * \acute{x} . Cf.:

PC * $\check{c}a-$ 'to milk' : Ub. $\check{s}a-$ id. : Abkh. * $\acute{x}a-$ id.;

Ad. ($\check{s}\chi^w a-$) $m\check{c}$ 'chestnut' : Ub. $\check{s}-x a$ id. : Abkh. * $\acute{x}a$ id.;

PC * $\check{c}a-$ 'to breed, give birth (to animals)', * $\check{c}a-ra$ 'young (of animals)' : Ub. $\check{s}a-$, $\check{s}a-da-$ 'give birth (to animals)' : Abkh. * $\acute{x}a-$ id.

The latter correspondence looks exactly like the palatalised correlate of the former; thus we can safely reconstruct * λ for "PC * \check{c} : Ub. \check{s} : Abkh. * x " and * λ' for "PC * \check{c} : Ub. \check{s} : Abkh. * \acute{x} ".

2. PWC * λ

In the word for 'night' on p. 269 (PC * $\check{c}a\check{s}a$, Ub. $\acute{s}a\acute{s}a$, Abkh. * $caxa$) Chirikba reconstructs * $caxa$, supposing an assimilation (* $ca\check{s}a > \check{c}a\check{s}a$) in PC and Ubykh (* $ca\acute{s}a > \acute{s}a\acute{s}a$). He himself mentions, however, PC * $na-\check{c}a-pa$ 'this night', where no conditions for assimilation exist and which still has * \check{c} . For

me the solution is obvious: the correspondence PC $*\check{c}$: Abkh. $*c$ can only point to a tense lateral affricate $*\check{\lambda}$. The correspondence is, in fact, absolutely parallel to PC $*\check{c}$: Abkh. $*\check{c} < \text{PWC } *\check{\lambda}$, see p. 711. In Ubykh one should have rather expected \acute{c} (cf. $*\check{\lambda} > \acute{c}$), but here it may be indeed due to assimilation ($*\acute{c}\acute{a}\acute{s}\acute{a} > \acute{s}\acute{a}\acute{s}\acute{a}$).

3. PWC $*\acute{\lambda}$

The correspondences for velar voiced fricatives in WC languages are "PC $*\gamma$: Ub. γ / κ : Abkh. $*\gamma$ " for $*\gamma$ and "PC $*\acute{\gamma}$: Ub. $\acute{\gamma}$: Abkh. $*\acute{\gamma}$ " for $*\acute{\gamma}$, see p. 722. Several roots, however, reveal a somewhat different correlation of PC $*\gamma$ and Abkh. $*\acute{\gamma}$ (Ubykh here can have either κ or $\acute{\gamma}$). These are the following cases:

PC $*pa-\gamma\acute{a}$ 'proud' : Ub. $\kappa a-b\acute{a}$ 'hard' : Abkh. $*ba\acute{\kappa}a$ 'hard; niggardly';

PC $*\gamma\acute{a}$ in $*\gamma\acute{a}-bza$ 'swear, damn' : Abkh. $*\acute{\kappa}a$ 'swear, curse';

PC $*\gamma a$ 'testiculi' : Ub. $-\acute{\gamma}a$ 'male' : Abkh. $*\acute{\kappa}a$ 'male'.

The Abkh. reflex ($*\acute{\gamma}$) here should remind of the development $*\acute{\lambda} > *\acute{x}$ (see above), and in two of these cases we have EC parallels with a lateral ($*\acute{\lambda}w\acute{e}rV$ 'hard' [NCED: 792] and $*liw\acute{\lambda}\acute{e}$ 'man, male' [NCED: 749]). It seems reasonable, therefore, to reconstruct a voiced palatalised affricate ($*\acute{\lambda}$) here. Note that we cannot reconstruct a fricative in this case, because for PWC $*\acute{\lambda}$ there exists a well established correspondence (PC $*L$: Ub. $*L$: Abkh. $*\acute{\lambda}$).

4. PWC $*\acute{\lambda}w$, $*\acute{\lambda}^w$

Here Chirikba follows the reconstruction presented in [NCED], however, again merging lax $*\acute{\lambda}w$ ($> \text{PC } *\acute{c}$) and tense $*\acute{\lambda}^w$ ($> \text{PC } *\acute{c}$).

5. PWC $*\acute{\lambda}^w$

Chirikba accepts my reconstruction of $*\acute{\lambda}$ ($> \text{PC } *t\check{h}$, Ub. L , Abkh. l); he, however, fails to see that the well known correspondence "PC $*h$: Ub. w : Abkh. l " is looking very much like the labialised counterpart of $*\acute{\lambda}$. It occurs in several roots:

PC $*ha$: Ub. wla : Abkh. $*la$ 'dog';

PC $*ha$: Ub. $w\acute{a}$: Abkh. $*-lV-$ 'enter';

PC $*ha-ga$: Abkh. $*la-ga-$ 'to grind' (cf. also $*l\acute{a}w\acute{a}$ 'grinding stone');

Ub. $was\acute{a}$: Abkh. $*las\acute{a}$ 'light';

Ub. $\acute{s}^w\acute{a}-wa$: Ad. $*-\acute{s}ha$ 'night' (see above).

Some of them also have EC counterparts with laterals (for **L^wa* 'enter' : PEC **=ā_rǰŮ* [NCED: 422–423]; **-L^wa* 'night' : PEC **rVmǰĀ*).

As a result it can be seen that PWC in fact possessed an almost full system of lateral affricates:

<i>*ǰ</i>	<i>*ǰ̃</i>	<i>*ǰ̥</i>	<i>*ǰ̥̃</i>
<i>*ǰ̃</i>	[<i>*ǰ̃̃</i>]	<i>*ǰ̥̃</i>	<i>*ǰ̥̃̃</i>
<i>*ǰ^w</i>	<i>*ǰ̃^w</i>	<i>*ǰ̥^w</i>	<i>*ǰ̥̃^w</i>
<i>*ǰ̃^w</i>	<i>*ǰ̃̃^w</i>	<i>*ǰ̥̃^w</i>	<i>*ǰ̥̃̃^w</i>

Lateral fricatives

I have nothing to add to Chirikba's reconstruction of **ǰ̃*, **ǰ̃̃*, **ǰ^w* and **ǰ̃^w*: these correspondences coincide exactly with those formulated in [NCED: 182–183].

As for **ǰ* and **ǰ̃*, I have shown above that they must be reconstructed in the place of Chirikba's **ǰ̃*. Chirikba has a phoneme **ǰ* present in one word (PC **pǰa-*, Ub. *pǰa-*, Abkh. **pǰša-* 'to look'), but I think that this is a result of variation in labialisation ([NCED: 1031], where the root is compared with EC **=VrǰwEn* 'to see, look'): PWC **pǰ-ǰa-* (without the prefix cf. PC **ǰa-^wǰa-* 'to see') > Ub. *pǰa-*, PC **pǰa-*, but PWC **pǰ-ǰ^wa-* > Abkh. **pǰša-*.

Additional remark: Chirikba gives a rather strange comment on p. 276. He says: "Nikolayev and Starostin reconstruct PWC **maǰwV* 'day', i. e. with the sequence *ǰw*, rather than with the labialised *ǰ^w*, which I don't find convincing". This is, of course, an unfortunate misprint instead of **maǰ^wV* — but every person who has read through the introduction and the description of WC phonology in [NCED] should be able to understand that no sequence like *ǰw* was ever reconstructed in any WC protoform. Furthermore, Chirikba protests against our separating PC **max^wa* 'day' and 'luck'. He says that "the meaning 'happy' might have evolved from a lost idiomatic expression containing the word 'day'". I would be grateful if he could produce such an expression; until that is done, I will prefer to compare the (fortuitously) homonymous **maǰ^wV* 'day' and **maǰ^wV* (~ -ǰ-) 'luck' with EC **mīǰwĀ* 'sun, day' and **wēnǰwē* 'luck' respectively.

Velar fricatives

Velar fricatives **ǰ̃*, **ǰ̃̃* and **ǰ̃^w* in Chirikba's system are the same as in [NCED: 183]. Our systems differ, however, in the respect of palatalised velars.

On p. 722 above I have proposed a reconstructed $*\gamma$ for the correspondence "PC $*\check{z}$: Ub. \check{z} : Abkh. $*\gamma$ " and a $*\check{L}$ for the correspondence "PC $*\gamma$: Ub. \check{z} / κ : Abkh. $*\gamma$ ". Chirikba does not acknowledge the first correspondence while reconstructing $*\gamma$ for the second one.

This is one of the cases when it is rather hard to draw conclusions solely on WC data and it is helpful to resort to external parallels. We have seen above that there are several cases of words with the latter correspondence having lateral consonants in their EC cognates. It is, therefore, very probable that palatalised $*\gamma$ should be reconstructed for the first correspondence and palatalised $*\check{L}$ for the second one.

Parallel to the correspondence "PC $*\gamma$: Ub. \check{z} : Abkh. $*\gamma$ " is its voiceless counterpart: "PC $*\check{s}$: Ub. \acute{s}/\acute{x} : Abkh. $*\acute{x}$ ". This is a rare phoneme, known to me in three examples:

PC $*\acute{s}t\acute{a}$ 'to freeze' : Abkh. $*\acute{x}\acute{a}$ 'to freeze, become cold', $*\acute{x}\acute{a}-ta$ 'cold';

PC $*p\acute{s}\acute{a}-sa$ / $*ps\acute{a}-sa$ (dissimilation < $*p\acute{s}\acute{a}-sa$?) 'tale' : Ub. $m\acute{s}\acute{a}$ 'to call, read' : Abkh. $*p\acute{x}\acute{a}$ id. (see above);

PC $*\acute{s}\acute{a}-pa$ 'first, for the first time' : Abkh. $*p\acute{x}\acute{a}$ 'earlier, before' : Ub. $f\acute{a}-\acute{x}\acute{a}$ id. (cf. also Abkh. $-\acute{x}\acute{a}$ in $ja-\acute{x}\acute{a}$ 'today', Ub. $\check{c}a-\acute{x}\acute{a}$ 'today', $\check{s}^wa-\acute{x}\acute{a}$ 'this year').

Chirikba does not accept this correspondence but instead produces his own one:

PWC $*\acute{x}$ > PC $*x$: Ub. \acute{s} : Abkh. $*\acute{x}$

Here in two examples (№ 4 and 5) Chirikba omits the Circassian parallels (for Ub. $\acute{s}a$, Abkh. $*\acute{x}\acute{a}$ 'to milk' we have PC $*\check{c}\acute{a}$; for Ub. $\acute{s}a-da$, Abkh. $*\acute{x}\acute{a}$ 'to give birth (to animals)' we have PC $*\check{c}\acute{a}$ id.). It is therefore clear that these are cognate sets actually reflecting PWC palatalised $*\acute{x}$; see above, p. 734.

In № 6 Chirikba compares PC $*\check{c}-xa$ 'to eat' with Abkh. $*\acute{x}\acute{a}$ 'provisions' (known only in compounds); as I have written above, I think a much better match is the usual Abkh. root for 'eat', $*fa$ (< PWC $*fV$, see p. 722). We are therefore left with two grammatical suffixes (№ 2 and 3) which, unfortunately, are rather often subject to irregular changes, and № 1: PC $*p\acute{x}\acute{a}$: Ub. $p\acute{s}\acute{a}$: Abkh. $*p\acute{x}\acute{a}$ / $*\acute{x}\acute{a}$ 'back part'. The Abkhaz root does indeed have the meaning 'back' in several verbal compounds, but it is very difficult to separate it from $*p\acute{x}\acute{a}$ 'earlier, before' (= PC $*\acute{s}\acute{a}-pa$, see above). Thus it turns out that here we simply have a case of PC $*x$: Ub. \acute{s} pointing to PWC $*x$, see above.

The correspondence that Chirikba proposes for PWC $*\acute{x}^w$ (PC $*x^w$: Ub. x : Abkh. $*\acute{x}$) is also very dubious. There are just two examples: (1) PC $*x^wa$ 'to fit, find place in' : Ub. xa 'to be (pl.)' : Abkh. $*xa$ 'to stay, remain'.

As Chirikba notes himself, PC $*x^wa-$ is actually the same as $*x^wa-$ 'to fall' (cf. Russian *nađamb* 'fall' : *nonađamb* 'to get, fit into'). This root corresponds to Ub. $\acute{x}a-$ 'to fall' and to Abkh. $*s^wa-$ 'to fall; to fit into' (used with preverbs). The same correspondence (PC $*x^w$: Ub. \acute{x} : Abkh. $*s^w$) is found in: PC $*x^wa-$ 'in favour of' (preverb) : Ub. $\acute{x}a-$ id. PC $*tx^wa-jə$ 'beech-tree' : Abkh. $*s^wə$ id.

It is natural to reconstruct a palatalised labialised $*\acute{x}^w$ for this correspondence.

As for the suffix PC $*-x^wa$ 'leftovers' : Ub. $-xa$ id. : Abkh. $*-xa$ id. (treated by Chirikba under the same root), as well as № 2, Ub. $-xa$ 'time for doing smth.' : Abkh. $*-xa$ id., $*a-xa$ 'time', here we may deal with an irregular delabialisation in Abkhaz (note that both roots are suffixed auxiliary morphemes easily liable to that kind of changes). In that case both examples can be treated as PWC $*x^w$, with sporadic delabialisation (which is actually quite frequent in the reflexes of this phoneme, not only in Abkhaz, but in Circassian as well).

There is also one rather reliable lexical example which seems to represent the voiced correlate of $*\acute{x}^w$, namely $*\acute{y}^w$ — with the reflexes PC $*b^w$ (note that no $*\acute{y}^w$ exists in PC) : Ub. \acute{b} : Abkh. $*z^w$. This is the numeral 'nine': PC $*b^wə$: Ub. $b\acute{b}ə$: Abkh. $*z^wə$.

Thus we are able to reconstruct an almost complete system of PWC velar fricatives:

$*x$	$*\gamma$
$*\acute{x}$	$*\acute{\gamma}$
$*x^w$	$[\gamma^w]$
$*\acute{x}^w$	$*\acute{\gamma}^w$

Uvular and pharyngeal fricatives

Above (in the section concerning uvular stops / affricates) I have already mentioned the basic differences between Chirikba's system and mine: a) where Chirikba reconstructs voiced uvular fricatives ($*b$, $*\acute{b}$, $*b^w$), I reconstruct voiced uvular stops (affricates) $*G$, $*\acute{G}$, $*G^w$; b) where Chirikba reconstructs voiced pharyngeals (= emphatic laryngeals) $*\text{ʕ}$, $*\acute{\text{ʕ}}$, $*\text{ʕ}^w$, I reconstruct voiced uvular fricatives ($*b$, $*\acute{b}$, $*b^w$).

The reason here is obvious: I am unwilling to suppose an extremely unusual development of the type $*\text{ʕ} > b$, whereas the other direction ($*b > \text{ʕ}$) is very common in many languages of the world.

There are, however, some other differences that I shall deal with below.

1. In [NCED] I have not reconstructed pharyngealised *GI for PWC. Two of Chirikba's comparisons, however, suggest a possibility of reconstructing *GI (> PC *K, Ub. KI, Abkh. *K) in the roots *Gla 'to widen' (PC *KAKA- 'to flower, bloom' : Ub. ča-Kla- 'to yawn' (*'open the mouth'; on Abkh. *KAKA 'spacious; fat, plump' see, however, p. 723) and *GIV- 'to cut' (Ub. qIə-KIə- : Tap. a-ŋwə-r-KKa-). Chirikba, of course, says that Ubykh pharyngealisation here is "expressive", which I doubt (see the discussion above). Likewise, a labialised *GI^w (absent in [NCED]) may be reconstructed in *GI^waGI^wa- 'sad, lonesome' (PC *K^waK^wa : Ub. KI^waKI^wa- 'to huddle oneself, shrivel' : Abkh. *K^wəK^wə-).

2. Chirikba reconstructs a palatalised labialised *K^w (which would be *G^w in my system) in the root for 'nine', where I have reconstructed a velar *j^w (see above): note that the apparent orthographic identity of *j^w in [NCED] and *j^w in Chirikba's book is deceptive (because his symbol /j/ = /K/ in [NCED], while his /ġ/ = /j/ in [NCED]).

There is, however, one good case of *G^w which Chirikba ignores: PC *C^wəK^wa- 'to envy' : Ub. C^wəmkə- : Abkh. *C^wəməKə- < *C^wəməG^wV-.

3. The reconstruction of voiceless uvular fricatives in Chirikba's book has to be discussed specially. Here his basic difference from [NCED] is the innovative idea that PWC *χ (as well as *χ̣, *χ^w, *χ̣^w) did not yield emphatic laryngeals (*h, *h^w) in Abkhaz, but instead changed into velars (*x, *x̣, *x^w) [Chirikba treats them as uvulars — since there is no distinction between velar and uvular fricatives in Common Abkhaz]. In their turn, the sets of correspondences where Abkhaz has *h, *h^w are treated as reflecting PWC emphatic laryngeals (pharyngeals) *h, *ḥ etc., once again supposing an unnatural change of the type *h > χ. We shall have to discuss the individual sets of correspondences here.

1. PWC *χ > PC *χ : Ub. χ, χI : Abkh. *x

‡(1) PC *χa- 'to knit, weave' : Ub. χa- 'to knit' : Abkh. *xVxa- 'to spin thread'. It is not clear to me why Chirikba proposes this Abkhaz parallel instead of the perfectly regular Abkh. *ha- 'to knit, weave'.

(2) PC *χərə : Ub. χər : Abkh. *xərə-xərə 'to snore'. I shall not discuss the validity of this example.

(3) PC *ka-xa- 'to do, accomplish' : Abkh. *xa- id. The match seems good, but it was difficult for me to identify the source of the Abkhaz reconstruction — before I looked into [Chirikba 1996] and found that *xa- is reconstructed on the basis of Tap. xa- — a word recorded in the Abaza village Gumlokt (with 2 isolects), apparently by Chirikba himself. No other

Abkhaz dialectal recording or dictionary shows such a word which makes its validity extremely dubious (a Circassian loan?).

(5) Kab. *χa-ra-χa-* 'to be empty-headed, giddy, fussy, fidgety' : Ub. *-χla* in *bzə-χla* 'pouring rain' : Abkh. **xəxə-* (in comp.) 'to run up to, hasten to'. I can only place a big question mark next to all these "cognates".

(6) PC **pχə-* : Ub. *pχa-* 'to strew, scatter'. Here there is no Abkhaz match, and in my system it is a perfect example of PWC **χ*.

(8) PC **ča-pχə-* 'to dry up, dry out' : Abkh. **pəxa-* 'warm'. Despite Chirikba, it is absolutely impossible to separate Abkh. **pəxa-* 'warm' from Ub. *pśə* 'warm' and PC **pś-ta-* 'boil', all of them descended with perfect regularity from PWC **pəλV*.

We are left with two examples that seem plausible to me:

(4) Ub. *χla-* 'to scrape, comb, scratch' : Abkh. **xaxa-* 'to scratch itself (ās a dog)'. For the Ub. form cf. also PC **tχa-* 'to scratch';

(7) PC **-χa* 'scant, wide-spaced' (in compounds) : Ub. *tχa* 'thin, sparse' : Abkh. **xaxa-* 'scant, thin'. The irregular development in Abkhaz here (*x* instead of the expected *h*) can be explained by a special development within a cluster (cf. Ub. *tχ-*, PC **tχ-*), see below.

The normal correspondence [NCED: 183] is "PC *χ* : Ub. *χ* : Abkh. *h*", cf.:

PC **χa-* 'to knit' : Ub. *χa-* id. : Abkh. **ha-* 'to weave, knit' (see above);

PC **λa-χa* 'fetter' : Ub. *λa-χ* id. : Abkh. **śa-ha-* id.;

Ub. *baχá-* 'to be angry' : Tap. *baħa-* id.

2. PWC **χ* > PC **χ* : Ub. *χ* : Abkh. **χ*

Here Chirikba lists four examples, stating himself that the first (Ub. *-χa* 'place of' : Abkh. **a-χə* 'towards, to') and the second ones (Ub. *χa-* pref. 'towards' : Abkh. **a-χə* 'adverb. prefix of reason') are probably etymologically identical. They are also most probably identical with № 3 (Ub. *-χa* in *ča-χa* 'today', *śwa-χa* 'this year' : Abkh. *-χa* in *ja-χa* 'today'), and neither one has a Circassian parallel. I happen to think that the PC parallel is **śə-* in **śə-pa-* 'for the first time' and the root actually reflects PWC **χV* (see above).

As for the fourth example (PC **tχa-* 'to scratch' : Ub. *tχə-* 'to tear'), here the PC form in reality corresponds to Ub. *χla-* 'to scratch' (see above) < PWC **(T)χla-*.

The correspondence "**χ* : *χ* : **χ*" thus does not exist. The normal correspondence for PWC **χ* is "PC **χ* : Ub. *χ* : Abkh. *h*", which Chirikba accepts (p. 298–299) but reconstructs as PWC **h*.

3. PWC $*\chi^w > \text{PC } *\chi^w : \text{Ub. } \chi^w : \text{Abkh. } *\chi^w$

The examples given are again absolutely heterogeneous.

(1) Here PC $*\chi^w a\check{z}a-$ 'to change' is compared with Ub. $\chi^w a-da-$ 'buy' and Abkh. $*x^w a-$ 'to take, buy' (used with prefixes). As a matter of fact, PC $*\chi^w a\check{z}a-$ has a perfect match in Tap. $\check{h}^w a\check{z}a-$ 'change', going back regularly to PWC $*\chi^w a\check{z}a-$ (with the standard correspondence PC $*\chi^w : \text{Abkh. } *\check{h}^w$; any chance of borrowing is out of the question), while Abkh.

$*x^w a-$ 'buy', $*x^w a$ 'price' correspond regularly to PC $*x^w a-$ 'buy' ([NCED: 842], with a more questionable Ubykh parallel: Ub. $fa-$ 'to pay') < PWC $*x^w V-$.

(2) Here PC $*(p)\chi^w a-$ in $*\check{z}a-(p)\chi^w a-mba$ 'finger', $*\lambda a-(p)p\chi^w a-mba$ 'toe' is compared with Abkh. $*-x^w a$ in $*ma-x^w a$ 'arm', $*\check{s}a-x^w a$ 'shin-bone', 'marrow'. The latter root, however, has been long ago [Климов 1967] identified (with the semantic shift 'joint' < 'sinew') with PC $*x^w a$ 'vein, sinew, blood vessel' < PWC $*x^w a$.

(3–4) PC $*j\partial-ka-\chi^w a-$ 'to pour in' : Ub. $\chi^w a-$ 'to tack, baste thread' : Abkh. $*\chi^w a-$ id. From Circassian one should rather adduce PC $*\chi^w a-pq\partial$ 'weaving loom; form or frame for modeling clothes'. The latter is compared by Chirikba in № 4 with Abkh. $*x^w a$ 'pivot of the shuttle' — the original meaning of which, however, is simply 'handle', preserved in Abaza (and probably identical with $*x^w a$ 'joint' in № 2). I would prefer to compare PC $*\chi^w a-$ with Ub. $\chi^w a-$ and Abkh. $*\check{h}^w a-$ 'to bind, plait' (cf. further PEC $*=ir\chi^w Vn$ 'to knit, weave, spin' [NCED: 655]). Abkh. $*x^w a-$ 'to tack, baste' should probably be regarded as an old cultural loanword.

(5) Here PC $*-\chi^w a$ and Ub. $-\chi^w a$, a component met in several words with the general meaning 'big' is compared with Abkh. $*x^w a\chi^w a$ 'long, tall, slender, prolonged'. This is most uncertain (several alternative etymologies — equally uncertain — can be proposed both for PC / Ub. and Abkh.).

(7–9) Here only PC forms are compared with Ubykh, which gives us a perfectly regular pattern for the correspondence "PC $*\chi^w : \text{Ub. } \chi^w$ ", but no Abkhaz parallels are given.

(10) Ub. $bla\check{s}\chi^w a$ 'wild grape' : Abkh. $*\check{s}\chi^w a\check{c}^w a$ 'husked corn-cob' (?). Extremely dubious both phonetically and semantically.

This leaves us with example (6) — PC $*t\chi^w a$, Ub. $t\chi^w a$: Abkh. $*x^w a\check{s}a$ 'butter'. I have rejected this comparison in [NCED: 948], but now I am not so sure. If we compare the three exceptions to the standard rule "PC $*\chi, *\chi^w : \text{Ub. } \chi, \chi^w : \text{Abkh. } *\check{h}, *\check{h}^w$ ", namely: PC $*t\chi a-$ 'scratch' : Abkh. $*xaxa-$; Ub. $t\chi a$ 'thin' — Abkh. $*xaxa$ and Ub. $t\chi^w a$ 'butter' : Abkh. $*x^w a\check{s}a$, we may be able to formulate a more general rule: PWC $*\chi > \text{Abkh. } *\check{h}$, but PWC $*T\chi > \text{Abkh. } *x-$ without laryngealisation.

The normal correspondence for $*\chi^w$ is "PC $*\chi^w$: Ub. $\chi^{(w)}$: Abkh. h^w " which Chirikba accepts (p. 299–301) but reconstructs as PWC $*h^w$.

4. PWC $*\acute{\chi}^w > \text{PC } *\chi^w$: Ub. $x^{(w)}$: Abkh. $*\acute{\chi}$

Here only one example is given, namely, the root for 'chestnut' which was already discussed above (p. 734) and was shown to have contained a lateral $*\acute{\chi}$. Here in the Ubykh form ($\acute{s}x\partial$) it is actually \acute{s} that corresponds to Abkh. $*\acute{\chi}$ ($*a-\acute{\chi}a$) and not x ! Also, the first part of the PC compound $*\acute{s}\chi^w a-m\acute{c}\partial$ is $*\acute{s}\chi^w a$ 'grass' or 'grey', and it is the part $*-m\acute{c}\partial$ that corresponds to Ub. $\acute{s}(-x\partial)$ and Abkh. $*(a)-\acute{\chi}a$. This is all a complete misunderstanding.

Again, the normal correspondence here is "PC $*\chi^w$: Ub. $\acute{\chi}$: Abkh. h^w ". Chirikba accepts it (p. 302–303) but reconstructs PWC $*h^w$.

It is thus clear that most of the examples that Chirikba gives to demonstrate the reflexes PWC $*\chi > \text{Abkh. } \chi$ etc., are invalid — except for a few roots that probably contained a consonant cluster like $*T\chi-$.

Pharyngealised uvulars

While discussing the system of uvulars we have seen that some Ubykh pharyngealised consonants have specific correspondences in other languages (despite the claim made by Chirikba that Ubykh pharyngealisation is always secondary).

Uvular pharyngealised fricatives normally have the same correspondences as non-pharyngealised ones, as we have seen above: cf. $*T\chi la-$ 'scratch' (see above), as well as some other examples (where these phonemes are treated by Chirikba as pharyngeals): $*p\partial\chi la-$ 'to rush at' (PC $*p\chi a-$: Ub. $p\chi la-$), $*\chi l^w\partial-$ 'to graze' (PC $*\chi^w\partial-$, Ub. $\chi l\partial-$, Abkh. $*h^w\partial-$); $*\chi l^wV-$ 'to crawl' (PC $*c^w a-\chi^w a-$, Ub. $\chi l^w\partial\chi l^w-da$, Abkh. $*h^w a-za-$); $*\chi l^w\partial-$ 'to rotate' (PC $*kara-\chi^w a-$, Ub. $\acute{c}a-\chi l^w\partial-$, Abkh. $*h^w\partial-$); $*\chi l^w\partial-$ 'to rob' (Ub. $\chi l\partial-c^w a$ 'finder of a lost animal or stolen girl' : PC $*\chi^w\partial-n\acute{c}a-$ 'rob' : Abkh. $*h^w\partial-$ 'rob'); $*\kappa IV-$ 'to be born, arrive' (Ub. $\kappa l\partial-$: Abkh. $\zeta a-$); $*\kappa l\partial-$ 'to howl' (PC $*\kappa a-$: Ub. $\kappa l\partial-$: Abkh. $*q^w a-\zeta a-$); $*b l\partial\kappa la-$ 'barren, thin' (PC $*b\kappa a$: Ub. $b l\kappa la$: Abkh. $*ab\zeta a$); $*b l\partial\kappa la$ 'eagle' (PC $*b\kappa a$: Ub. $b l\kappa la\acute{z}a$); $*m l\partial\kappa l^w a$ 'evil, unlucky' (PC $*m\partial\kappa^w a$: Ub. $m\partial\kappa l^w a$).

By analogy with the system of affricates one would also expect the presence of palatalised pharyngealised phonemes ($*\acute{\chi}l$, $*\acute{\epsilon}l$ etc.) in PWC. There are, in effect, several rows of correspondences that Chirikba for the most part treats as "irregular" but which can be perfectly well explained if we assume the presence of pharyngealised palatalised uvular fricatives:

a) PWC *χI > PC *h : Ub. χI : Abkh. *h

Chirikba acknowledges this correspondence, reconstructing here his pharyngeal *h (p. 297) (and thus having to reject the examples with PC *χ : Ub. χ : Abkh. *h, see above). Following his principle of the "secondary nature" of Ubykh pharyngealised phonemes, he writes here: "Ub. χ, χI" with a comma. It is, however, very easy to notice that in all cases when we actually have a Circassian parallel (with *h), Ubykh has only χI, cf.:

PC *-ha 'suffix denoting the action occurring in cycles, rounds' : Ub. χIə-χIə 'by rounds, circularly';

PC *ha(n)čə 'scoop' : Ub. χIas 'spade, shovel';

PC *hama 'threshing floor' : Ub. χIəmə 'harvesting';

Ub. cʷə-χIə- 'to curse' : Abkh. *cʷə-ha- id. (Chirikba does not list a PC parallel, but cf. perhaps PC *čə-ha- 'to provoke smb.').

All the examples with Ub. χ here actually represent matches between Ub. χ and Abkh. *h, perfectly explained by PWC *χ (in my system, see above):

Ub. baχa- : Tap. baħa- 'be angry, sulky' (see above);

Ub. χaχa- 'be astonished, surprised' : Abkh. *ħa- 'become afraid';

Ub. tχara 'break in small pieces' : Abkh. *təħara-ħʷa 'rhythmical (of heart's beating)' (this is, however, a rather dubious example).

There is not a single case of "PC *h : Ub. χ" — which means that once again what we deal with is a special PWC pharyngealised phoneme which I reconstruct as *χI.

b) PWC *ɛI > PC *j : Ub. ɛ : Abkh. *ɟ

This is the correspondence met in the numeral 'eight' (PC *jə : Abkh. *a-ɟə), classified by Chirikba as "irregular" (p. 295). Ubykh unexpectedly has ɛʷ here (Ub. ɛʷa), which may be explained by an old analogical influence of the next numeral, PWC *bɟʷə (see above).

Another example may be *ɛIə- 'evil; guilt' (Ub. ɛə-, Abkh. *ɟa- 'guilt'; PC *-jə suffix meaning 'bad').

c) PWC *ɛIʷ > PC *w / *ɛʷ : Ub. w : Abkh. *ɟʷ

This correspondence (with several examples) is also accepted by Chirikba, but treated as "irregular" (p. 294). It is observed in *ɛIʷV 'metal, copper' (PC *ɛʷə, Ub. wə-, Abkh. *(bə)ɟʷa), *ɛIʷəna 'house' (PC *wəna, Abkh. *ɟʷəna) etc.

The following system of uvular fricatives can therefore be reconstructed:

χ	κ	χ ^l	κ ^l
χ̣	κ̣	χ̣ ^l	κ̣ ^l
χ ^w	κ ^w	χ ^{lw}	κ ^{lw}
χ̣ ^w	κ̣ ^w	[χ̣ ^{lw}]	κ̣ ^{lw}

Resonants

Most resonants (**m*, **n*, **w*, **j*) have not changed at all since PWC; they give identical reflexes and are identically reconstructed by Chirikba and in [NCED].

There are, however, some differences as to the reconstruction of liquids. In [NCED] I reconstruct a contrast of palatalisation for liquids, thus postulating a distinction between **r* / **ṛ* and **l* / **ḷ*. Chirikba sticks to 2 liquids (**r* and **l*) which is certainly simpler — but, once again, he has to admit a lot of secondary unmotivated splits (thus **r* > PC **d*-, **t*-, Ub. *L*-, *d*-; Abkh. **r*-, *l*-) which certainly does not look convincing. There are, however, not many examples of initial liquids, and it is rather hard to argue in favour of particular solutions.

Winding up this rather lengthy review — which I, in fact, have used to elucidate some points of WC reconstruction that were only briefly mentioned in [NCED] — I should say that, despite my disagreement with many of Chirikba's conclusions, I have read the book with satisfaction. The author clearly supports the idea of Common North Caucasian. He also thinks that Common West Caucasian can be reconstructed (despite the skepticism of some of our predecessors). He adds a significant number of new WC lexical matches, and among his valid phonological propositions I can name: the reconstruction of CA **v*; the reconstruction of PWC **q̣*; the PC reflex **κ* of PWC **ǧ* which was hitherto unknown; the development of PWC **tχ* > CA **x*. The book will undoubtedly stimulate further research in the West Caucasian and North Caucasian areas.