A revisal of the Proto-Indo-European sound inventory

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CONSONANTS		labial	coronal (dental)	dorsal				glottal
				palatal	velar	velar labialized	uvular	
plosive	voiceless	*p	*t		*k (*ḱ)	*kʷ	*q (*k)	*ʔ (*h_1)
	voiced	*b (*b^h)	*d (*d^h)		*g (*$ǵ^h$)	*g^w (*g^{wh})	*ɢ (*g^h)	
	voiced creaky		*d̰ (*d)		*g̰ (*ǵ)	*$g̰^w$ (*g^w)	(*g)	
fricative			*s			*x^w (*h_3)	*χ (*h_2)	*h (*h_1)
liquid			*l *r					
nasal		*m	*n					
semivowel		*w		*y				

VOWELS	front	central	back
high	*i		*u
mid	*e *ē		*o *ō
low		*a *ā	

Justification for creaky phonation

In order to explain a curious absence of ***b**, proponents of the *Glottalic Theory* have reinterpreted traditional 'breathy voiced stops' as voiced stops with *plain* phonation, thus making traditional ***bʰ** the absent phoneme. The weakness of Glottalic Theory however is in the fact that evidence for ejectives in the protolanguage is terribly poor.

An easy compromise between the traditional and ejective perspectives involves a simple shift of phonation such that traditional 'breathy voice' is plain while traditional 'plain voice' is now 'creaky voice'. This at once addresses the unexpected absence of ***b**, acknowledges the concerns of Glottalic Theory proponents and avoids unnecessary assumptions about how ejectives might have eroded in almost all branches of PIE after its dissolution despite a plethora of other language families preserving such sounds (ie. Kartvelian, Abkhaz-Adyghe, Nakh-Daghestanian, Na-Dene, Salishan, etc.).

In some dialects like Balto-Slavic where traditional plain and breathy stops have merged, we may reconceive the event as a rather trivial merger of creaky phonemes to plain ones. On the other hand, in early Greek and Indo-Iranian dialects, the PIE phonation contrast would have shifted to a new plain/breathy contrast, encouraging the development of voiceless aspirated stops to balance against voiced aspirated ones and the development of *Grassmann's Law*.

Justification for uvularity

Revising the system to treat traditional palatalized velar and plain velar stops as velar and uvular stops respectively requires another shift in thinking and a subtle shift of articulation of dorsal stops towards the back of the mouth. This solves the problem of marked palatalized velars being predominant throughout traditionally reconstructed PIE, even in demonstratives and affixes.

In this new system, the presence of uvularity is directly related to vowel colouring. Thus, traditional ***h₂** *and* plosive ***k** colour neighbouring short ***e** to [æ]. Long vowels are not coloured due to *Eichner's Law*. It is well advised to nonetheless write ***e** regardless of colouring since the merger of coloured ***e** [æ] with ***a** [a] could not have yet taken place on the PIE level. The *Satem Shift* is easily explained as a slight frontward shift of articulation of the velar system while in other dialects, the merger of ***q** into plain ***k** is entirely natural.

Identification of laryngeals

The phoneme ***h₁** is the easiest to identify and there is little controversy that it was, at least in part, a glottal stop, ***ʔ**. In medio-final environments ***ʔ** likely surfaced as ***h** since, if it had not, we might expect the development of ejectives in at least some dialects as a result of sequences of stop plus ***h₁**.

The phonemes ***h₂** and ***h₃** both appear to colour vowels but for different reasons. The former colours neighbouring ***e** via uvularity as per above while the latter, according to

evidence from Anatolian, eventually colours the same vowel to ***o** via the transference of consonantal labialization to the adjacent vowel by erosion, a phenomenon that was not effected by labialized plosives which coincidentally did not experience this same erosion. This caused the merger of the two phonemes into one, ***x**. Working backwards and with respect to modifications of the PIE sound system through uvularity and phonation, ***h₂** aligns nicely with the traditional plain series (***k**, ***g**, ***gʰ**) while ***h₃** aligns with the traditional labialized velar series (***kʷ**, ***gʷ**, ***gʷʰ**). This thereby identifies the true nature of the contrast between these two laryngeals: ***h₂** = [χ] and ***h₃** = [xʷ].

Presumably, ***h₂** had shifted from plain to uvular articulation some time in Pre-PIE, motivated by an aesthetic alignment of ***h** (***h₁**) with the plain series (ie. traditionally 'palatal') on the one hand and ***x** with the uvular series on the other. The resulting absence of plain velar fricative ****x** would make the later delabialization of ***h₃** particularly apt in order to rebalance this system and the theorized deuvularization of ***h₂** would be a minor change.

Examples in PIE using new system

	Traditional	Revised
water	***wódr̥**	***wóḏr̥**
they carried	***bʰérn̥t**	***bérn̥t**
this	***ḱos**	***kos**
I take	***kápmi**	***qépmi**
teardrop	***dáḱru**	***ḏákru**
earth	***dʰǵʰōm**	***dgōm**
six	***sweḱs**	***sweks**
ten	***déḱm̥**	***ḏékm̥**