The syllabic liquids  $/\hat{\mathbf{r}} / \hat{\mathbf{r}} / \hat{\mathbf{r}} = \mathbf{r}$  are included as unitary vocalic phonemes, following Schenker (1995: 94), rather than as combinations of  $\frac{1}{5}$   $\frac{1}{5}$   $\frac{1}{5}$   $\frac{1}{5}$  because these groups descend from PIE syllabic liquids and many descendant South Slavic dialects which retain syllabic liquids in this position (including most of those underlying canonical OCS) do not show any evidence of an intervening oral-vowel + liquid stage (such a view is shared by Bethin 1998: 71-72; cf. also Bulgarian dialectal evidence in Stojkov 1954: 130-131, where hard consonants precede reflexes of the LCS /l/ r/ even in dialects with secondarily-palatalised consonants before fallen weak LCS /ь/). The need for both front and back \*f, \*r, is unambiguously shown by the East Slavic reflexes /er/ and /or/ (Ru. смерть, морковь), but \*ĺ vs \*l is more complicated: PIE \*plnos, \*wlk os > Lithuanian pilnas 'full', wilkas 'wolf' (LCS \*pĺnъ, \*vĺkъ) vs Lith. stulpas (LCS \*stĺpъ 'pillar') suggests that Balto-Slavic had differentiated front/back variants of the PIE syllabic \*1 (Bethin 1998: 69), but the ancestor to East Slavic backed all vowels preceding tautosyllabic /l/ (Ru. молоко < Proto-ESl. \*molko < LCS \*melko > OCS млѣко), and thus only has /ol/ reflexes here: Ru. волк, столб, полный. It's true that Polish has wilk and milczeć (<\*mĺčĀti), but the Polish reflexes are complicated and likely have more to do with the surrounding consonants: \*pĺnъ by contrast gives pełny with hardened /l/ and the Polish non-palatalising-/e/ reflex of \*ъ, and the differing reflexes in wierzch <\*vrҳъъ, śmierć <\*sъmrҳъ and martwy <\*mrҳҳтъъ rule out any explanation based on the nature of the LCS syllabic-liquid alone (for more discussion see Bethin op. cit.: 73-75). While most OCS shows no sign at all of a front-back distinction in the syllabic-liquids and writes the reflexes of these groups overwhelmingly with and <ax>>, the Kiev Folia, which is the only OCS text that reflects a pre-Jer Shift stage and is very nearly flawless in its etymologically correct <\*r॔, ผ<u>รษอ</u>ยะลภช <\*r॔, and ภูมชุมอาวุตช <\*ĺ (Winslow 2022: 313), and even Zographensis spells all 5 occurences of \*vĺk- 'wolf' with ษณษะ-/ษณอง- and all 15 instances of its \*-mĺč- root with -รรมอง-(e.g. ஊகுக்குக்காட்டு). Therefore, taken as a whole the Slavic evidence pretty securely points to front and back variants of both syllabic liquids, and for searching purposes it's far preferable to denote them with separate symbols<sup>7</sup> rather than as the sequences /ыг ъг ы 1/8.

## Consonants

The so-called 'dejotated' reflexes of \*tj (and \*kt+front-vowel) and \*dj are denoted using the modern Serbian Cyrillic letters /ħ/ and /ħ/ respectively, because the commonly used alternatives, i.e.

dialect, rather than one which had a clear way of writing <soft consonant> + <o>, is likely the reason that /o/ reflexes are so rarely detectable in the early texts, since <e> had to be used for both /e/ and /'o/, cf. the spelling @BILLANZ of the Kipchak word /jovşan/ 'wormwood' in the Hypatian Codex, whose modern cognates (Turkmen yowşan /jowşan/, Kazakh жусан /žuwsan/, Azeri yovşan) unambiguously point to a Kipchak /o/), and the history of the East Slavic /o/ reflexes remains the subject of much disagreement, so it's simpler for everyone if I continue the traditional practice of writing LCS \*e after palatals, even if that strictly speaking is inconsistent with my use of \*Æ.

In the database I will have to use the single Unicode characters <ṛ ṭ ḷ ḹ>, rather than what's shown in my table, since the latter cannot actually be rendered without using the letters for /r ŕ l ĺ/ plus the 'combining ring below' U+0325 symbol, which means searches for the consonantal liquids on their own will also return results containing syllabic liquids. The same problem affects /ē y/, which I will have to replace with <ē ȳ>.

B To my mind the only evidence in support of a genuine jer + liquid stage comes from the paradigms of verbs like OCS κατρωτη < \*sωτήμι, where the syllabic /ή/ in the root alternates with /ω/ depending on the vocality of the following morpheme: the e.g. 3sg. pres. \*sωτωτες (Zogr., Supr. κατωρετα) or (one possibility of the) 3<sup>rd</sup> sg. aorist \*sωτωρε must have /ωτε/, while the 3<sup>rd</sup> pl. aorist \*sωτήξε (Supr. κατρωμα) and the other possibility for the 3<sup>rd</sup> sg. aorist \*sωτήξε (Psal. Sin. Psalm 104 κασωμα, or with a different prefix Mar. μομωμα <\*otή, being word-final or pre-consonantal, must be syllabic /ή/. The same alternation occurs in the zero-grade forms of verbs like \*umerti, as is clear from the Polish reflexes umarł <\*umrŷμω vs umrę <\*umωτρ. The argument could be that at some stage, before the LCS tendency towards Open Syllables became dominant, the roots in these paradigms were surely unitary /tĭr/, /mĭr/, i.e. 3sg. aor. /sĭ.tĭ.re/ vs 3<sup>rd</sup>. pl. aor /si.tĭr.še/, and that the latter's closed /tĭr/ syllable was only forced to open itself up by changing to /tf/ under the pressure of the LCS Law of Open Syllables. Thus at least one source of the syllabic-liquids could be shown to have developed from a vowel + liquid stage, but that still doesn't prove that they all did, or that the change of /ĭr/ to /f/ in these verb-forms was not merely a move to an already-existing syllabic-liquid phoneme.