Genesis of Greek

Notes

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PIE voiced aspirated stops become PG voiceless aspirated stops.

$$\overset{\text{G}^{(\text{w})\text{h}}}{\begin{bmatrix} + \text{ cons} \\ - \text{ cont} \\ + \text{ s.g.} \\ + \text{ voi} \end{bmatrix}} \rightarrow \overset{\text{C}^{(\text{w})\text{h}}}{\begin{bmatrix} - \text{ voi} \end{bmatrix}}$$

```
inventory <- c("dʰugh₂ter-", "sroˈbʰeyoh₂", "ˈh₂eǧrom", "ˈtreyes",
               "h₂ster-", "h₂enh₁mos", "ˈseptm̥")
inventory <- gsub("(d)(ʰ|ʷʰ|ʰʷ)", "t\\2", inventory, perl = T)
inventory <- gsub("(b)(ʰ|ʷʰ|ʰʷ)", "p\\2", inventory, perl = T)
inventory <- gsub("(g)(ʰ|ʷʰ|ʰʷ)", "k\\2", inventory, perl = T)
```

PIE *s becomes PG *h at the beginning of a word or intervocalically

$$*\text{s} \rightarrow *\text{h} \; / \; \begin{cases} \#\_\text{V} \\ \text{V}\_\text{V} \end{cases}$$

PIE intervocalic *y is elided.

```
inventory <- gsub("(a|e|i|o|u)y(a|e|i|o|u)", "\\1\\2", inventory, perl = T)
```

$$*\text{y} \rightarrow \emptyset \; / \; \text{V}\_\text{V}$$

Word initial shenanigans concerning PIE *y that have no solid explanation

$$*\text{s} \rightarrow *\text{h} \; / \; \begin{cases} \#\_\text{V} \\ \text{V}\_\text{V} \end{cases}$$

PIE word final *m becomes PG *n

```
inventory <- gsub("m$", "n", inventory, perl = T)
```

$$\overset{*\text{m}}{\begin{bmatrix} + \text{ cons} \\ - \text{ son} \\ + \text{ lab} \\ - \text{ cor} \\ + \text{ nas} \end{bmatrix}} \rightarrow \overset{*\text{n}}{\begin{bmatrix} - \text{ lab} \\ + \text{ cor} \end{bmatrix}} \; / \; \_\#$$

PIE word-initial *h_1, *h_2, and *h_3 become PG *e, *a, and *o respectively.

```
inventory <- gsub("^h₁", "e", inventory, perl = T)
inventory <- gsub("^h₂", "a", inventory, perl = T)
inventory <- gsub("^h₃", "o", inventory, perl = T)
```

$$*\text{h}_1 \rightarrow *\text{e} \;/\; \#\_$$

$$*\text{h}_2 \rightarrow *\text{a} \;/\; \#\_$$

$$*\text{h}_3 \rightarrow *\text{o} \;/\; \#\_$$

PIE interconsonantal laryngeals show the same reflexes as the word-initial.

```
inventory <- gsub("(t|tʰ|d|s|p|pʰ|b|k|kʰ|g|h|m|n|l|r)h₁(t|tʰ|d|s|p|pʰ|b|k|kʰ|g|h|m|n|l|r)",
                  "\\1e\\2", inventory, perl = T)
inventory <- gsub("(t|tʰ|d|s|p|pʰ|b|k|kʰ|g|h|m|n|l|r)h₂(t|tʰ|d|s|p|pʰ|b|k|kʰ|g|h|m|n|l|r)",
                  "\\1a\\2", inventory, perl = T)
inventory <- gsub("(t|tʰ|d|s|p|pʰ|b|k|kʰ|g|h|m|n|l|r)h₃(t|tʰ|d|s|p|pʰ|b|k|kʰ|g|h|m|n|l|r)",
                  "\\1o\\2", inventory, perl = T)
```

$$*\text{h}_1 \rightarrow *\text{e} \;/\; \text{C\_C}$$

$$*\text{h}_2 \rightarrow *\text{a} \;/\; \text{C\_C}$$

$$*\text{h}_3 \rightarrow *\text{o} \;/\; \text{C\_C}$$

PIE syllabic *m and *n may have become PG *a by this time.

```
inventory <- gsub('(m̥|n̥)', 'a', inventory, perl = T)
```

$$\begin{matrix} *\text{m̥} & *\text{n̥} \end{matrix} \begin{bmatrix} +\text{ cons} \\ -\text{ son} \\ +\text{ syl} \\ \alpha\text{ lab} \\ \beta\text{ cor} \\ +\text{ nas} \end{bmatrix} \rightarrow \begin{matrix} *\text{a} \\ \\ \\ \\ \\ \\ \end{matrix} \begin{bmatrix} -\text{ con} \\ -\text{ high} \\ +\text{ low} \\ -\text{ front} \\ -\text{ back} \\ -\text{ rnd} \end{bmatrix}$$