## Pitman Shorthand: Basics


word
territory $\quad\{t * e . r i \cdot t$ our $\cdot r$ in $\}$ metaform (4 segments) ( t$)[\mathrm{e}] \&(\mathrm{r}) \&[\mathrm{i}](\mathrm{t})[\mathrm{ou}] \&(\mathrm{r})[\mathrm{i}]$ |
strokes = consonant signs, e.g. (t), (r):
writing vowel signs:
 in between:

*a glyph of one or more words phonetically written in Pitman shorthand = consonantal + vowel part

## Consonant Signs: Strokes




Trnka, B.: A Phonological Analysis of Present-day Standard English. Prague 1935

## Writing Pitman Shorthand with METAFONT and LATEX

- Pitman shorthand* $\rightarrow$ Pitman 2000:
simplified alphabet, phonetic writing, short forms and phrases


## SHORTHAND



- text2Pitman: http://www3.rz.tu-clausthal.de/~rzsjs/steno/Pitman.php and DEK.php, Gregg. php, Suetterlin.php
*1837
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## Vowel, Diphtong and Triphone Signs



Jones IPA vowel quadrilateral
"triphone signs

diphtongs
1st

3rd
[ai] "my" [oi] "joy" [ow] "out" [you] "few

## Segments*

 conso: $:=\mathrm{b}|\mathrm{p}| \mathrm{d}|\mathrm{t}| \mathrm{v}|\mathrm{f}| \mathrm{dh}|\mathrm{th}| \mathrm{zh}|\mathrm{sh}| \mathrm{ng}|\mathrm{n}| \mathrm{m}|\mathrm{l}| \mathrm{r}|\mathrm{w}| \mathrm{hw}|\mathrm{y}| \mathrm{h}$

size:

|  | (1) $[\mathrm{ei}]: \mathrm{t}$ | (1) [ei] | (1) [ei]: tr | (m) [ii]: t | (m) [ii] | (m) [ii]: tr |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| prefixes: | $\underset{(p, r)[e i]}{\dot{*}}$ | $\underset{(\mathrm{f}, \mathrm{r})[\mathrm{ii}]}{C_{i}}$ | $(p, 1)[e i]$ | $\underset{(\mathrm{f}, \mathrm{l})[\mathrm{iij}]}{C_{i}}$ |  | $\frac{\ell}{, s t[e](p)}$ |
|  |  | suffixes: | ঠ. | - | $\checkmark$ | б |
| ,s(p,r)[ei],s[uh] (p,l) (p) [ii],s (p) [ii], sis (p) [ou],st (p) [ou] |  |  |  |  |  |  |
| $\bigcirc$ | 广 | $j$ | ২ | ל | $\bigcirc$ | $\bigcirc$ |

(m) [aa], str (p) [e];n (p) [e];n,s (p) [uh];f (p) [uh];f,s (p) [a];shn (p) [a];shn,s *3 $\times 2^{4} \times 2^{4}$ forms possible

## text2Pitman

input: Do you think, at your age, it is right? $\rightarrow$ tokenizer $\rightarrow$
$\rightarrow$ do you think $_{\sqcup}$, tat $_{\sqcup}$ your $_{\sqcup}$ age $_{\sqcup}, \dot{\text { it }}$ is right $_{\sqcup}$ ?

| Unisyn lexicon $\rightarrow$ stenemizer $\rightarrow$ mf run $\rightarrow$ |  |  |  |
| :---: | :---: | :---: | :---: |
| token | pronunciation | metaform | stenem |
| 1 , |  | (_comma_) |  |
| 2 ? |  | (_question_) | 8 |
| 3 age | \{* ee jh \} | [ei] (jh) | 1 |
| 4 at | $\{* a t\}$ | [a] (t) |  |
| 5 do you |  | (d) \& ( $\mathbf{u}_{-}$) | h |
| 6 it is |  | (t) , s | b |
| 7 right | \{ r * ait \} | (r) [ai] \& (t) | 1 |
| 8 think |  | (th) | ( |
| 9 your |  | (_r) | ) |

mf-file: beginS(7);I(,r, , , );V(ai,-1);J;I(,t,, , ); J;endS; \%right latex $\rightarrow$ dvips $\rightarrow$ gs $\rightarrow$ ppmtogif

## Stenems: Dis/joining Segments

| morphological affixes | $\cdots$ |  | $\cong$ |
| :---: | :---: | :---: | :---: |
|  | - $\operatorname{com}[\mathrm{o}](\mathrm{n})$ | (g) [ou] ing | [a] (n) +Upp |
| numbers, past tense | 24 | ᄂ | 4 |
|  | (_two_) (_four_) | [aa] (s) \& (k)/(t) | (sh) [ou]/(d) |
| intersections | 4 | $\downarrow$ | - $f$ |
|  | tax form | company boom | successfull company |

left vs. right ,s

(Writing) exercise with keys
*Annotated, searchable DjVu files (viewable also with a DjVu browser plugin)

