The `phonrule` package (v1.2.0)

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1 Purpose

This package provides macros for typesetting phonological rules like those in *Sound Pattern of English* (Chomsky, Noam & Morris Halle. 1968. *The sound pattern of English*. New York, Evanston, and London: Harper & Row).

2 Usage

   `\phon{⟨input⟩}{⟨output⟩}`

The command `\phon` has two arguments: the first one is the input of the rule and the second is its output. Here is an example with the code and the result it produces:

(1)   `\phon{z}{r}`

(2)   z → r

   `\phonc{⟨input⟩}{⟨output⟩}{⟨context⟩}`

`\phonc` adds a third argument for the context:

(3)   `\phonc{a}{ə}{[-stressed]}`

(4)   a → ə / [–stressed]

The commands `\phonl`, `\phonr` and `\phonb` add a place holder line and put the context, respectively, on the left (l), on the right (r) and on both sides (b):

(5)   a. `\phonl{k}{c}{i}`
      b. k → t / i_

(6)   a. `\phonr{t}{ts}{u}`
      b. t → ts / _u

(7)   a. `\phonb{s}{z}{V}{V}`
      b. s → z / V_V

The `\oneof` command provides the possibility to compile several contexts, one per line, embraced by a left curly bracket.

(8)   `\phonc{t}{ts}{`
      `\oneof{`
      `\phold i \\`
      `\phold u}`
      `}`

(9) $\text{t} \rightarrow \text{ts} \ / \ \left\{ \begin{array}{l} \_\text{i} \\ \_\text{u} \end{array} \right.$

The `\phonfeat` command allows you to insert feature specifications:

(10)   `\phonc{t}{ts}{\phold`
      `\phonfeat{`
      `-consonantal \\`
      `+high \\`
      `+front}`
      `}`

(11) $\text{t} \rightarrow \text{ts} \ / \ \_ \begin{bmatrix} -\text{consonantal} \\ +\text{high} \\ +\text{front} \end{bmatrix}$

`\phold` typesets a place holder line. You can nest `oneof` and `phonfeat` commands for complex rules.

(12)   `\phonc{x}{y}{\oneof{`
      `\phold z \\`
      `\phonfeat{`
      `+feature x \\`
      `-feature y`
      `} \phold`
      `}}`

(13) $\text{x} \rightarrow \text{y} \ / \ \left\{ \begin{array}{l} \_\text{z} \\ \begin{bmatrix} +\text{feature x} \\ -\text{feature y} \end{bmatrix} \_ \end{array} \right.$

You can use `\env`, `\envl`, `\envr`, `\envb` for rules with more than one output: these commands typeset only the different outputs with their respective environments.

(14)   `\phon{x}{\oneof{`
      `\envr{w}{z} \\`
      `\envl{v}{\phonfeat{`
      `+feature x \\`
      `-feature y`
      `}}}}`

(15) $\text{x} \rightarrow \left\{ \begin{array}{l} \text{w} \ / \ \_\text{z} \\ \text{v} \ / \ \begin{bmatrix} +\text{feature x} \\ -\text{feature y} \end{bmatrix} \_ \end{array} \right.$

3 Changelog

v1.2.0

Added

- `ragged2e` package for `\Centering` command

Fixed

- Fixed: now the content of the feature matrices is centred and not left aligned

v1.1.0

Changed

- definition of `\phonfeat` and `\oneof` with `\pbox` (requires package `pbox`)

    ### Fixed

- documentation typos

v1.0.0

Added

- new commands `\env` for personalised outputs

Changed

- definition of commands with `\ensuremath`
- environments to commands
- place holder to 1.5ex length, -1.5pt vertical position
- curly brackets to only left in `\oneof` command