

# The `phonrule` package

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## 1 Purpose

This package provides macros for typesetting phonological rules like those in Sound Pattern of English (Chomsky and Halle 1968).

## 2 Usage

`\phon{<input>}{<output>}`

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

- (1) `\phon{z}{r}`
- (2)  $z \rightarrow r$

## 3 Usage

`\phonc{<input>}{<output>}{<context>}`

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

- (3) `\phonc{a}{ə}{[-stressed]}`
- (4)  $a \rightarrow ə / [-\text{stressed}]$

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}{t}{t}`  
b.  $z \rightarrow r / \text{ — }$
- (6) a. `\phonr{t}{ts}{u}`  
b.  $t \rightarrow ts / \text{ — } u$
- (7) a. `\phonb{s}{z}{V}{V}`  
b.  $s \rightarrow z / V \text{ — } V$

The `\oneof` environment provides the possibility to compile several context, one per line, enclosed in curly brackets. You need to use a `\mbox`.

(8) `\phonc{t}{ts}{`  
`\begin{oneof}`  
`\placeholder \mbox{i} \\\`  
`\placeholder \mbox{u}`  
`\end{oneof}`  
`}`

(9)  $t \rightarrow ts / \left\{ \begin{array}{c} \text{--- i} \\ \text{--- u} \end{array} \right\}$

`\placeholder` typeset a place holder line with spaces before and after. The `\phonfeat` environment allows you to insert feature specifications:

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

(11)  $t \rightarrow ts / \text{---} \left[ \begin{array}{c} \text{--- consonantal} \\ \text{+high} \\ \text{+front} \end{array} \right]$

`\phold` typeset a place holder line without spaces. The environments `\oneofnest` and `\phonfeatnest` allows one-of environments (inside curly brackets) and feature specifications (inside square brackets) to be nested inside a `\oneof` environment.

## References

Chomsky, Noam and Morris Halle. 1968. *The sound pattern of English*. New York, Evanston, and London: Harper & Row.