nevelok — \LaTeX{} package for automatic definite articles for Hungarian\textsuperscript{*}

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Abstract
\LaTeX{} package for automatic definite articles for Hungarian.

1 Introduction

In Hungarian, the definite articles “a” and “az” are determined by the pronunciation of the subsequent word. If the first phoneme of the pronounced word is a vowel, then the article is “az”, otherwise “a” must be used. The simple commands help the \LaTeX{} user to automatically adjust the definite article according to chapter, equation, page, etc. number.

2 Usage

\texttt{\aaz\{⟨reference⟩\}} and \texttt{\Aaz\{⟨reference⟩\}}, where \textit{reference} is a reference to a label of a \LaTeX{} object, or simply a defined label (section, equation, figure, etc.). The difference stands in letter casing: the \texttt{\aaz} is the lower case command producing “a” and “az”, while \texttt{\Aaz} is the upper case version, producing “A” and “Az” for the beginning of a sentence. The commands also work if the reference is put in round parantheses.

\texttt{\aazx\{⟨reference⟩\}\{⟨s1⟩\}\{⟨s2⟩\}} and \texttt{\Aazx\{⟨reference⟩\}\{⟨s1⟩\}\{⟨s2⟩\}} commands are the extended versions of the base \texttt{\aaz} and \texttt{\Aaz} commands, which simply put the reference between the symbols \texttt{s1} and \texttt{s2}. This is useful for example when referencing equations, where the equations’ numbers are often put in round parantheses.

\texttt{\aazt\{⟨reference⟩\}} and \texttt{\Aazt\{⟨reference⟩\}} commands can be used for simple text, i.e. for text representing non-labels.

Note: The reference argument—in contrast to v1.00—must be a label, not a \texttt{\ref} command. For example: \texttt{\aaz\{eq:some\_equation\}}

Requirements: The package requires/uses the xstring package.

3 Limitations

3.1 Using with babel

The package can be used with babel, however, one cannot use shorthands. Therefore, one has to load babel with the \texttt{safe=none} option:

\texttt{\usepackage[magyar, safe=none]\{babel\}}

3.2 Other limitations

The numeric labels are handled correctly by the package if they are lower or equal to 9999. Larger numbers are planned to be handled in future versions of the package.

\textsuperscript{*}This file describes version v1.03, last revised 2015/12/05.

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4 Implementation

\ifUnDefinedCs\ The \ifUnDefinedCs macro checks whether a command is defined, and is used to check for undefined labels. It is taken from [1].
\%
1 \%
2 \def\ifUnDefinedCs#1{\expandafter\ifx\csname#1\endcsname\relax}%
3 \%

\aaz\ The \aaz command outputs “a” or “az”, depending on the argument. To be used inside the sentence.
\%
4 \%
5 \DeclareRobustCommand{\aaz}[1]{%
6 \ifUnDefinedCs{r@#1}%
7 \PackageWarning{nevelok}{Reference not (yet) defined!}%
8 a(z) ??%
9 \else%
10 \z@aaz{\ref{#1}}{a}{az}{}{}%
11 \fi%
12 }%
13 \%

\Aaz\ The \Aaz command outputs “A” or “Az”, depending on the argument. To be used when starting a new sentence.
\%
14 \%
15 \DeclareRobustCommand{\Aaz}[1]{%
16 \ifUnDefinedCs{r@#1}%
17 \PackageWarning{nevelok}{Reference not (yet) defined!}%
18 a(z) ??%
19 \else%
20 \z@aaz{\ref{#1}}{A}{Az}{}{}%
21 \fi%
22 }%
23 \%

\aazx\ The \aazx command is the extended version of \aaz taking 3 parameters: the second and third parameters will be put in the output before and after the reference.
\%
24 \%
25 \DeclareRobustCommand{\aazx}[3]{%
26 \ifUnDefinedCs{r@#1}%
27 \PackageWarning{nevelok}{Reference not (yet) defined!}%
28 a(z) ??%
29 \else%
30 \z@aaz{\ref{#1}}{a}{az}{#2}{#3}%
31 \fi%
32 }%
33 \%

\Aazx\ The equivalent of \aazx for the beginning of a sentence.
\%
34 \%
35 \DeclareRobustCommand{\Aazx}[3]{%
36 \ifUnDefinedCs{r@#1}%
37 \PackageWarning{nevelok}{Reference not (yet) defined!}%
38 a(z) ??%
39 \else%
40 \z@aaz{\ref{#1}}{A}{Az}{#2}{#3}%
41 \fi%
42 }%
43 \%

\aazt\ The equivalent of \aaz for simple, non-label text.
\%
44 \%
45 \DeclareRobustCommand{\aazt}[1]{%
\Aazt The equivalent of \aazt for the beginning of a sentence.

\z@aaz The main command of the package, used by the two provided commands: \z@aaz{⟨reference⟩}{⟨art1⟩}{⟨art2⟩}{⟨sym1⟩}{⟨sym2⟩}. The art1 and art2 parameters stand for the definite articles used in case of consonants and vowels, respectively. Parameters sym1 and sym2 are used to handle cases when the reference has to be put between some symbols, e.g. “(” and “)”. 

\% 
\newcount\nev@ind 
\newcount\nev@vege 
\newcount\nev@eppme 
\newcount\nev@az 
\newcommand{\z@aaz}[5]{% 
\begingroup 
\IfBeginWith{#1}{1}{% if the reference starts with 1, 
% special care is required 
\StrLen{#1}{\nev@hossz} 
\nev@ind=\nev@hossz 
\nev@vege=0 
\loop% loops while it does not find a digit at the end 
% (in \ref-s, strangely, an \hbox {} appears at the end; 
% this loop was actually written to remove these) 
\StrChar{#1}{\nev@ind}{\nev@kar} 
\IfSubStr{1234567890}{\nev@kar}{\nev@vege=1}{}% 
\ifnum\nev@vege=0 
\advance\nev@ind by -1 
\repeat 
\StrLeft{#1}{\nev@ind}{\nev@paramuj} \paramuj will contain the 
% ‘‘cleaned’’ parameter 
\StrPosition[1]{\nev@paramuj}{.}{\nev@elsopontpozicioja} 
\StrLen{\nev@paramuj}{\nev@hossz} 
\nev@eppme=\nev@elsopontpozicioja 
\advance\nev@eppme by -1 
\StrLeft{\nev@paramuj}{\nev@hossz}{\nev@prefix} 0 
\else% 
\StrLeft{\nev@paramuj}{\nev@eppme}{\nev@prefix} 
\fi% 
\StrLen{\nev@prefix}{\nev@elsohossz} 
\ifnum\nev@elsohossz=1\relax 1 
#3% 
\else\ifnum\nev@elsohossz=2\relax 10 
#2% 
\else\ifnum\nev@elsohossz=3\relax 100 
#2% 
\else\ifnum\nev@elsohossz=4\relax 1000 
#3% 
\fi\fi\fi\fi% 
}\% 
\StrChar{#1}{1}{\nev@kar} 
\nev@az=0 
\IfSubStr{234567890}{\nev@kar}{\% digits that require ‘‘a’’; 
% this is redundant, but was kept for some reasons
\nev@az=0\relax%
\IfSubStr{SAEIOMFLNRSAEIOMFLNR}{{\nev@kar}}{% digits and letters
\nev@az=1\relax%
}\{%
\nev@az=0\relax%
\}%
\ifnum\nev@az=1\relax%
\#3%
\else%
\#2%
\fi%
\f1%
\endgroup%
\%
\%
\%
\%
5 References


6 Change History

v1.00
General: First public release .............. 1

v1.01
General: Added support for referencing in captions (e.g. in figures), added extra commands for extended functionality, etc. ................. 1

v1.02
General: Minor bug fixes ................. 1

v1.03
General: Bug fixes ...................... 1