

nevelok — L^AT_EX package for automatic definite articles for Hungarian*

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Abstract

L^AT_EX 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 L^AT_EX user to automatically adjust the definite article according to chapter, equation, page, etc. number.

2 Usage

\aaz The `nevelok` package provides the following *main* commands: `\aaz{<reference>}` and
\Aaz `\Aaz{<reference>}`, where *reference* is a reference to a label of a L^AT_EX object, or simply a defined label (section, equation, figure, etc.). The difference stands in letter casing: the `\aaz` is the lower case command producing “a” and “az”, while `\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 parentheses.

\aazx The `\aazx{<reference>}{<s1>}{<s2>}` and `\Aazx{<reference>}{<s1>}{<s2>}` com-
\Aazx mands are the extended versions of the base `\aaz` and `\Aaz` commands, which simply put the reference between the symbols *s1* and *s2*. This is useful for example when referencing equations, where the equations’ numbers are often put in round parentheses.

\aazt The `\aazt{<reference>}` and `\Aazt{<reference>}` commands can be used for simple
\Aazt text, i.e. for text representing non-labels.

Note: The reference argument—in contrast to v1.00—must be a label, not a `\ref` command. For example: `\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 `safe=none` option:

```
\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.

*This file describes version v1.01, last revised 2015/11/17.

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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{#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{#1}{A}{Az}{#2}{#3}%
41  \fi%
42 }%
43 %%
```

`\aazt` The equivalent of `\aaz` for simple, non-label text.

```
44 %%
45 \DeclareRobustCommand{\aazt}[1]{%
```

```

46 \z@aaz{#1}{a}{az}{}{}%
47 }%
48 %%

\Aazt The equivalent of \aazt for the beginning of a sentence.
49 %%
50 \DeclareRobustCommand{\Aazt}[1]{%
51 \z@aaz{#1}{A}{Az}{}{}%
52 }%
53 %%

\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 param-
eters 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 “)”.

54 %%
55 \newcount\nev@ind%
56 \newcount\nev@vege%
57 \newcount\nev@eppme%
58 \newcount\nev@az%
59 %%
60 \newcommand{\z@aaz}[5]{%
61 \begingroup%
62 \IfBeginWith{#1}{1}{% if the reference starts with 1,
63 % special care is required
64 \StrLen{#1}[\nev@hossz]%
65 \nev@ind=\nev@hossz%
66 \nev@vege=0%
67 \loop% loops while it does not find a digit at the end
68 % (in \ref-s, strangely, an \hbox {} appears at the end;
69 % this loop was actually written to remove these)
70 \StrChar{#1}{\nev@ind}[\nev@kar]%
71 \IfSubStr{1234567890}{\nev@kar}{\nev@vege=1}{}\relax%
72 \ifnum\nev@vege=0%
73 \advance\nev@ind by -1%
74 \repeat%
75 \StrLeft{#1}{\nev@ind}[\nev@paramuj]% \paramuj will contain the
76 % ‘‘cleaned’’ parameter
77 \StrPosition[1]{\nev@paramuj}{.}[\nev@elsopontpozicioja]%
78 \StrLen{\nev@paramuj}[\nev@hossz]%
79 \nev@eppme=\nev@elsopontpozicioja%
80 \advance\nev@eppme by -1%
81 \ifnum\nev@elsopontpozicioja=0%
82 \StrLeft{\nev@paramuj}{\nev@hossz}[\nev@prefix]%
83 \else%
84 \StrLeft{\nev@paramuj}{\nev@eppme}[\nev@prefix]%
85 \fi%
86 \StrLen{\nev@prefix}[\nev@elsohossz]%
87 \ifnum\nev@elsohossz=1% 1
88 #3%
89 \else\ifnum\nev@elsohossz=2% 10
90 #2%
91 \else\ifnum\nev@elsohossz=3% 100
92 #2%
93 \else\ifnum\nev@elsohossz=4% 1000
94 #3%
95 \fi\fi\fi\fi%
96 }{%
97 \StrChar{#1}{1}[\nev@kar]%
98 \nev@az=0%
99 \IfSubStr{2346789}{\nev@kar}{% digits that require ‘‘a’’;
100 % this is redundant, but was kept for some reasons

```

```

101     \nev@az=0%
102   }{%
103     \IfSubStr{5AEIOUFLMNRsaeiouflmnr}{\nev@kar}{% digits and letters
104                                           % that require ‘‘az’’
105     \nev@az=1%
106   }{%
107     \nev@az=0%
108   }%
109 }%
110 \ifnum\nev@az=1%
111   #3%
112 \else%
113   #2%
114 \fi%
115 }%
116 \ #4#1#5%
117 \endgroup%
118 }%
119 %%

```

5 References

- [1] Victor Eijkhout, *TeX by Topic. A TeXnician’s Reference*, Addison-Wesley, Wokingham, England, 1992.

6 Change History

v1.00		in captions (e.g. in figures), added
General: First public release	1	extra commands for extended func-
v1.01		tionality, etc.
General: Added support for referencing		1