

The English documentation of the package `engpron`*

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Abstract

This package is a tiny handle hardly correctly sewn on the package `tipa` the author of which, FUKUI Rei, I thank very much. I also wish to thank T. LACHAND-ROBERT for his book [3], without which I would far less able than I am (poorly) nowadays, and Josselin NOIREL for his invaluable pieces of advice with which he provided me on `fr.comp.text.tex`.

This new (2) version can use the package `drac` created by Josselin NOIREL if the relevant option is chosen as it is the case by default.

This package provides macros beginning with the `£` character, made active, which enable us to write the British or American English pronunciation as one can find it in the “English Pronouncing Dictionary” by Daniel Jones. There is an option to typeset the pronunciation in the style of the Harrap’s [4].

I provide a table (page 7) at the end of this document in which one could find the macros beginning with a `£` and their effect when the options by default `monstress` and `jones` are enforced.

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*This document corresponds to the file `engpron v2`, dated 2008/08/15.

1 Usage

This package loads `tipa`, with which one can write with the API¹ through \LaTeX . It provides some macros which enable one to typeset the British or American English pronunciation *à la* JONES [1] (default) or as HARRAP [4] with the package option `HARRAPS`.

The `drac` package is used by default to make of £ a robust (in \LaTeX parlance) active character.

1.1 The Package and its Options

Here come the options of `engpron`. You can load `engpron` with e. g. `\usepackage[wild]{engpron}`.

I have tried to group the options according to their effect.

1.1.1 £'s Behaviour

- WILD** By default or with the option `WILD` this package makes the character £ active et redefines it to enable the definition of macros such as `£a` and their usage in all the text. It also enables us to obtain a uniform presentation of the pronunciation with the macro `\pron{⟨text in API⟩}`. If you prefer, you can chose the option `TAME` which reestablish the character £ in its usual category in the encoding given by `fontenc[⟨TI⟩]` i. e. makes it active and makes it print the symbol of the pound. You will have to use either the macro `\Pron{⟨text in API⟩}` or `\PRON{⟨text in API⟩}` — and thus obtain the presentation ensured by `\pron` — or the environment `LivreActive` in which £ is active.
- DRAC** By default or explicitly with option `DRAC` this package uses the `drac` package to turn £ into a *robust* active character where *robust* has the meaning it has in the context of \LaTeX moving arguments. The opposite option is `NODRAC` with which `drac` is not loaded and £ keeps the definition given in the version 1.
- NODRAC**

1.1.2 The Look of the Text

- JONES** By default `engpron` enforces the option `JONES` and so gives the presentation of the final “r” [a^r] and of the optional sounds according to [1]. You then obtain [n^ən] for the “schwa ə” and [at^a] for optional “t”.
- HARRAPS** There is also the option `HARRAPS` which then gives the presentation which you find in [4]: the optional sounds are given in parenthesis and the final “r” looks like this *r*. Moreover [o] denotes what Jones [1] writes [əu].

1.1.3 The Syllable Divisions and the Stresses

The package offers many options supporting the syllable division. With option `HYPHENABLE` you allow \LaTeX to cut words on the explicit marks of syllable division — see below `£k`, page 4 — and on the marks of primary or secondary stresses — `£b`, `£B`, `£h` et `£H`. In such a case I will say that the marks of syllable divisions and of stresses ar *cuttable*.

- UNHYPHENABLE** With the option `UNHYPHENABLE` you forbid the cutting of words on those marks. Those marks are then said to be *uncuttable*. To keep the behaviour of the preceding version, the option `UNHYPHENABLE` is the default.

- VISIBLE** You can chose between option `VISIBLE` and option `INVISIBLE`. With the first, `VISIBLE`,

1. Alphabet Phonétique International

the macro of syllable division `£k` produces a glyph which is defined by `\EPSyllabeMarque` — macro that you can redefine with `\renewcommand` and which by default gives a plain dot. When you enforce option `INVISIBLE`, the macro `£k` produces no glyph but is un/cutttable according to the chosen option between `HYPHENABLE` and `UNHYPHENABLE`.

`MONSTRESS` `engpron` offers two other options: `MONSTRESS` which is the default and `TIPASTRESS`. They are mutually exclusive and set the glyphs which present the primary and secondary stresses.

`TIPASTRESS` The user can redefine with `\renewcommand` the macros used by default — `\EPaccentprincipal` and `\EPaccentsecondaire` — and thus replace the default glyphs I provide. With the first, and default, option you obtain `'` and `,` as glyphs of primary and secondary stress respectively; with the second option you obtain `'` and `,` respectively, glyphs provided by `tipa`.

1.1.4 Draft and Error

`FINAL` Some macros, *viz.* `£K`, `£m`, and `£M`, await a letter to determine what they have to do. However

`DRAFT` all the letters are not suitable. With option `FINAL` which is the opposite of `DRAFT` `engpron` doesn't produce anything in the document but emits a warning you can find in the `.log` file if you have choosen option `NICE` or stops on an error if option `TOUGH` is enforced. With

`NICE` option `DRAFT` you can read, in the document, the following “message” `?!<*>!?` where `*`

`TOUGH` plays here the role of the *erroneous* character.

1.1.5 Summary of Available Options

To sum it up:

The default option	and the opposite option	act on
<code>WILD</code>	<code>TAME</code>	active status of <code>£</code>
<code>DRAC</code>	<code>NODRAC</code>	robustness of <code>£</code>
<code>JONES</code>	<code>HARRAPS</code>	notation of the pronunciation
<code>MONSTRESS</code>	<code>TIPASTRESS</code>	notation of stresses
<code>UNHYPHENABLE</code>	<code>HYPHENABLE</code>	creation of discretionary break
<code>VISIBLE</code>	<code>INVISIBLE</code>	visibility of syllable divisions
<i>In case of an error with <code>£K</code>, <code>£M</code>, or <code>£m</code></i>		
<code>FINAL</code>	<code>DRAFT</code>	written trace in the doc
<code>NICE</code>	<code>TOUGH</code>	\TeX warning or error

1.2 The £ Macros

I will now present the macros the name of which begins with `£`.

To create these macros I used once again the book [3] by T. LACHAND-ROBERT. It's from its example of macros using `§` to write greek letters that came the idea of doing something on the same line to denote the pronunciation of English words. I needed that then for I was teaching maths in English to French pupils in “Euro” section. I found bits every now and then which gave me the means of creating macros such as `\EP@haut`.

In this section I present just some of the macros which are all given in the table on page 7.

1.2.1 The Stress Marks

`£h` You will obtain the stress marks — as defined by the option `TIPASTRESS` or `MONSTRESS`

`£H` — with, for the primary stress `£h` or `£H` and for the secondary stress with `£b` or `£B`. The

`£b`

`£B`

£B “rationale” for them are, in French, **h** for *haut* and **b** for *bas* but I think it is safe to think to *high* and *below*.

From version 2, when option HYPHENABLE have been chosen these stress marks are cuttable i. e. they give T_EX discretionary breaks.

1.2.2 Syllable Division

What pertains to syllable division, i. e. marking the limits of the syllables, is introduced in version 2 of the package.

`\EPSyllabeCoupure` You may want, or need, to show the limits of the syllables of words as you can see it in the Jones [1]. To this effect, the package provides one macro `\EPSyllabeCoupure` linked to the `£k` macro. Its behaviour is controlled by the following pairs of opposite options: HYPHENABLE/UNHYPHENABLE and VISIBLE/INVISIBLE. With HYPHENABLE the macro gives T_EX a discretionary break which it doesn't with option UNHYPHENABLE. With option VISIBLE `£k` produces the glyph determined by `\EPSyllabeMarque` whereas with INVISIBLE it produces nothing.

By default, `\EPSyllabeMarque` is equal to a period (full stop). You should take care of the fact that, for `\EPSyllabeMarque` is an argument of `\discretionary`, it suffers some restrictions such as e. g. to not contain maths.

`£KX` Whatever are the enforced options, you can always give T_EX a discretionary break with `£KX` which doesn't produce any glyph so `£KX` is cuttable and invisible. With `£KB` and `£KH` you get respectively primary and secondary *cuttable* stress marks. With `£Kk` you get an always *visible* and *uncuttable* syllable division mark. Lastly `£KK` produces an always visible and cuttable syllable division mark. The look of the marks is as a matter of course set by `\EPSyllabeMarque`. You will have remarked that lower case letters are linked to *uncuttable* marks and upper case letters to *cuttable* ones. I have feel no urge to provide a `£Kx` which would have done strictly nothing, I tend to believe that then a void string is largely enough.

1.2.3 Optional Sounds

`£X` To note optional sounds you will use the `£X` macro as in `£X⟨one letter⟩` for `£X` **must** be followed by **a single letter**. The macro doesn't work if followed by a group. It normally can deal with the optional sounds of the English language. It makes the difference, when option JONES is enforced, between the letter “e” which gives [°] and the others such as “t” which gives [t] with `£Xe` and `£Xt` respectively.

To denote the final and — to use Jones' term — potential “r” which is pronounced, in British English, when followed by a word beginning by a vowel, you will use `£Z` which is redefined when option HARRAPS is chosen, see 1.1.2.

1.3 Other Macros and one Environment

I give the user an easy access to some macros which enable us to set some details of presentation. You can redefine them with `\renewcommand` and so doing obtain your own style.

As already said above — see MONSTRESS — the macros `\EPaccentprincipal` and `\EPaccentsecondaire` define the glyphs obtained with `£H` and `£B` respectively.

`\EPAccentCoupure` Since version 2 the `\EPAccentCoupure` macro set the behaviour of the stress marks when there is a break. The default is to keep the stress mark with the text which begins the new line i. e. `ˌhaɪ.fənˈeɪ.ʃən` is cut, if necessary, as `ˌhaɪ.fən|ˈeɪ.ʃən`.

`\EPSyllabeCoupure` Since version 2 the `\EPSyllabeMarque` set the mark for syllable division and `\EPSyllabeCoupure` defines the behaviour of the mark in case of break. Default is to keep the mark at

the end of the line so 'hai.f^on is cut in 'hai.|f^on.

`\EPouvrante` The macros `\EPouvrante` (*opening*) and `\EPfermante` (*closing*) define what precedes
`\EPfermante` and follows the pronunciation. The macro `\EPtextestyle` defines the style of the text of
`\EPtextestyle` the pronunciation. By default, the first two macros give [and]; `\EPtextestyle` is defined
as `\rmfamily\upshape`.

In what follows I will write that “the pound is active” to mean that the character £ is active and **is not** defined to produce the glyph of the pound sterling but to give the macro beginning with £. In all other cases I will write that “the pound is inactive”.

`\pron` Those three macros are used by `\pron` and `\PRON` to produce a uniform presentation
whatever the contexte and the activity of the pound. The macro `\pron{<text>}` produces a
presentation of the pronunciation as you can find it usually after a word in a text. You will
use it when “the pound is active.” You will then write `\pron{ma£i}` to obtain [maɪ].

`\PRON` When “the pound is inactive” you will use `\PRON{<text>}` to obtain the same result. In
fact as in this document I’ve loaded the package `engpron` with option `TAME` I’ve obtained,
in the preceding paragraph, [maɪ] with `\PRON{ma£i}`. And now I’ve said it all!

Lastly when the pound is inactive, `\Pron{<text>}` give the means of enter API without
the presentation given by `\pron`. With `\Pron{£Hf£in£k£i£kg£en}` you will simply obtain
'fm.i.gən without “decoration.”

`\ActiveLaLivre` The macro `\ActiveLaLivre` makes the pound active, it is used by `\Pron`, `\PRON`, and
the following environment. You can use it for example in a array — with the package `array`
— to make the pound active in a column.

`\MakeHyphenable` *To conclude*, with the antagonistic macros `\MakeHyphenable`/`\MakeUnHyphenable` you
`\MakeUnHyphenable` can thwart the effect of options `HYPHENABLE`/`UNHYPHENABLE` .

`\MakeHyphenable` redefines the macros linked to `£H`, `£h`, `£B`, `£b`, and `£k` in order that they
produce cuttable marks. `\MakeUnHyphenable` redefines them to obtain uncuttable marks.
The visibility of `£k` is not modified.

`\MakeVisible` Other pair of opposite macros: `\MakeVisible`/`\MakeInVisible`. The macro `\MakeVi`
`sible` redefines the macro linked to `£k` to make it produce visible marks, `\MakeInVisible`
`\MakeInVisible` does the opposite. The cuttability of `£k` is not modified.

1.4 Conclusion

You will notice, if you look at the table 2 or the code of this package, that there remain
place to define other macros using an active pound.

First of all some letters are not used and e. g. `£S` does nothing. On the other hand,
you can define other macros with more than one letter behind £ but you will have to type
`£{aeiou}` to use a macro the true name of which would be `\£aeiou`. I do believe it should
be kept for macros with a substantial effect ;-).

As a conclusion, I will freely admit that the chosen code is not necessarily optimal.
Actually, I have made it along in view of my needs and I cannot say that there is a general
rule for organization. Nevertheless you will be able to notice some efforts made towards
systematization.

You should feel free to make changes you want as long as — in accord with the license
under which this package is made available — you change its name. You can, if you prefer,
ask for modification and I will try to make it according to your requirement if feasible but
I make **no** promise to be quick and clever.

References

- [1] Daniel JONES †. *English Pronouncing Dictionary*. 15th Edition. This major new edition edited by Peter Roach & James Hartman. Cambridge University Press, 1997.
ISBN : 0-521-45903-6
- [2] Daniel JONES †. *English Pronouncing Dictionary*. Cambridge University Press, 1991.
- [3] T. LACHAND-ROBERT. *La maîtrise de T_EX et L^AT_EX*. Masson, Paris, Milan, Barcelone, 1995.
ISBN : 2-225-84832-7.
- [4] J. E. MANSON, M.A. *Harrap's New Shorter French And English Dictionary*. Revised edition © George G. Harrap & Co. Ltd. 1967. Bordas diffuseur, 1980.
ISBN : 0 245 59062 5

2 Table of the £ Macros

Vowels							
£a	æ	£A	ɑ:	£e	ə	£E	ɜ:
£i	ɪ	£I	i:	£o	ɒ	£O	ɔ:
£u	ʊ	£U	u:	£v	ʌ	£x	ɜ
£c	ɔ	£C	ɑ	£y	ɝ		
Diphthongs							
£p	aɪ	£q	eɪ	£r	ɔɪ	£P	eə
£Q	ɪə	£R	ʊə	£w	əʊ	£W	aʊ
£V	oʊ						
Consonants							
£d	dʒ	£f	θ	£j	ʒ	£l	l̥
£n	ŋ	£s	ʃ	£t	tʃ	£z	ð
£T	t̥	£L	ɫ				
Stresses							
£b	ˈ	£B	ˈ	£h	ˈ	£H	ˈ
£Kb	ˈ	£KB	ˈ	£Kh	ˈ	£KH	ˈ
Syllable division							
£k	.	£Kk	.	£KK	.	£KX	
French nasalised vowels							
French pronunciation							
£Ma	ã	£Mi	ẽ	£Mo	õ	£Mu	œ
English pronunciation							
£ma	ã:	£mi	æ̃	£mo	õ:	£mu	õ:

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