paresse user guide*

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Abstract

This package implements an example from T. Lachand-Robert in [1]. It provides a means of typing isolated greek letters with the character `§` activated and redefined. Instead of `\(\alpha\)` one types `§a` to obtain α.
Important: You have to load it **after** the inputenc package if the latter is used. Moreover the sign `§` must be a letter for TEX.
Since version 4, one can use this package even with utf8-encoded source for LATEX, LuaLATEX, or XELATEX.

Résumé

La documentation française pour l'utilisateur de l'extension paresse est disponible sous le nom de `paresse-fra`.

Contents

*This file describes version 5.0.1, last revised 2020/10/06. *Adieu to skeyval* edition.

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1 Introduction

This package provides only a 'quick and low-cost' access to greek letters which one can obtain with a macro such as `\alpha` or `\Omega`. It provides also an environment and a macro which make possible the use of § to type in those letters. Because of an `\ensuremath` we are not bound to explicitly enter —i.e. by typing `$ $` or `\( \)` or else `\[ \]` or anything whatsoever with the same effect— mathematics mode to obtain a greek letter.

The idea of the method is from T. Lachand-Robert and described in [1]. I have just add the `\ensuremath` which is so agreeable to write macros.

There is *no* macros for the lowercase omicron nor for the uppercase alpha, beta... that one can obtain with the latin roman letters with the same look. I have not had the courage nor the strength to build a solution which would provide a means of obtaining an upright uppercase alpha in a math formula enbedded in an italic boldfaced text.

Even if the meaning of the French 'paresse' is just 'lazyness' I would like to enphasize that the name of this package comes from the fact that the sign § can be used to point at a paragraph and looks like an S. So there is no connection between the name and the not unfrequent sin of the same (French) name... or maybe...

1.1 Why a 5th Version?

I was happily using paresse almost every day until when, some days ago, all hell broke loose! I was insulted just by loading paresse. To put it in a nutshell: the culprit is an improvement of the LaTeX 2_ε kernel which wreaks havoc in the highly unconventional code of skeyval. As it seems very improbable that that package will be corrected any time soon, I've decided to rewrite some parts of paresse with expl3.

So that is why I touch the more than seven-year-old code of this package.

With this 5th version come two *sub*-packages: paresse-old and paresse-utf8 which are directly loadable. They have the same options and commands as paresse itself. In fact paresse loads one of them according to the situation.

One will use paresse-utf8 if and only if the source is utf-8 encoded and compiled with `latex` i. e. with the TeX-engine and the LaTeX format. In all other case, on will use paresse-old.

The documentation of paresse covers the use of the three packages.

1.2 Why a 4th Version?

I don't remember exactly on what occasion — age, disk crash and computer mishap aiding — and even less when — more than a year ago, I'm afraid[1] — Christian Tellechea wrote me that he would be glad to use paresse in his utf-8 encoded sources with LaTeX — not with XeLaTeX nor LuaLaTeX.

We exchanged emails, Christian sent me working material. He even made me the gift of two versions, the second better for the identification of the encoding passed, as an option, to inputenc. However I procrastinated. My personal life and my job may have interfered with the development of this package.

At last, here is the thing.

The newest feature should escape the user of LuaLaTeX or XeLaTeX and even of LaTeX loading inputenc with an option such as `latin1` or `latin9`. However, henceforth, one can use this package with LaTeX loading inputenc with option `utf8`.

[1] I wrote this section in 2013 when the 4th version was published.

I take advantage of this new version to add a §-macro: §Z which produces §, symbol already available with \S, so I don't dare to present it as a real "shortcut".

1.3 Why a 3rd Version?

With a mail Claudio Beccari kindly informed me that there was an encoding of the greek alphabet with latin letters some 15 years before I commited this extension. This encoding was devised by Sylvio Levi who, at the time, was designing the first greek font for TEX, using the correspondance between greek and US keyboard. Claudio wrote to me, and I can't but agree with him, that if one is used to Levi's encoding, one would rather keep one's habit in order to use paresse.

I, then, decided to provide a new couple of mutually exclusive options: the first one is legacy with which one obtain the original encoding of this extension and which is active by default, the other one is Levi which provides Sylvio Levi's encoding.

I take advantage of this update to make some cosmetic changes: from now on all inner *secret* macros[2] have a name which begins with \GA@; the .dtx file is reorganised to facilitate the translation of the documentation.

2 Usage

One loads the package with \usepackage{paresse}. When one uses LaTeX with an 8-bit encoded source (e.g. latin9), one must load paresse **after** the package inputenc whith the correct option.

In all cases the sign § must be recognised as a letter by TEX.

One will obtain the same behaviour, but for the exception pointed out in paragraph **restriction** on page 3, with inputenc and option utf8.

There is no such restriction when one compiles with LuaLaTeX or XeLaTeX a source encoded in utf-8.

By default the package is loaded with option wild and so the macros such as §a are immediately available. If one prefers one can choose the option tame by writing \usepackage[tame]{paresse}. One must then use the command \ActiveLaParesse or the environment ParesseActive to use the '§-macros'.

When 'paresse' is active, one has just to type §a in to obtain α. One has access, by the same means, to all the other greek letters to which a macro is devoted such as \alpha, see the tables 5.1 and 5.2. One obtains α^{β} with \(§a^{§b}\) when § is active.

Restriction One will note that the curly braces are *not* compulsory and that one obtains the same result with just \(§a^§b\) **unless** one uses a utf-8 encoded source with LaTeX.

3 The Package Options

In the margin the default options are in boldface.

tame / wild

- tame is the contrary of wild which is the option by default. When tame reigns, one **must** use an environment ParesseActive or a command \ActiveLaParesse in order to use the §-macros.

[2] Macros *à la mode* LaTeX 2ε. As of version 5.0, partially *translated* in expl3, when dealing with expl3 commands and variables I use the prefix paresse.

`legacy / Levi`

- LEVI is the contrary of LEGACY which is the default. With LEGACY one uses the original encoding of paresse as it is given by the table 5.1. If the option LEVI is enforced, one uses the Sylvio LEVI encoding, see the table 5.2.

`ttau / ttheta`

- TTAU is the contrary of TTHETA which is selected by default. When TTHETA is active `§t` gives θ in the contrary `§t` gives τ. In all cases, θ is given by `§v` and τ by `§y`. That option is ineffective when one has chosen LEVI.

  Remark: when one has chosen the option LEGACY, Θ is 'regularly' obtained with `§V` and *also* with `§T` whatever is the chosen option. In the case of the option LEVI, `§V` doesn't correspond to any greek letter.

`epsilon / varepsilon`

- EPSILON is the contrary of VAREPSILON which is selected by default. With EPSILON, `§e` gives ϵ otherwise `§e` gives ε.
- The following 'couples' behave as EPSILON, VAREPSILON: THETA and VARTHETA; PI and VARPI; RHO and VARRHO; SIGMA and VARSIGMA; PHI and VARPHI.

The default options are VAREPSILON, THETA, PI, RHO, SIGMA, VARPHI, WILD and LEGACY. That ensures that this 3rd version behaves, by default, as the preceding one.

4 Commands and Environment

`\makeparesseletter` This command gives the letter-catcode to the 'character' §. After that one can use § in the name of a macro, for instance. It corresponds to the well-known `\makeatletter`.

`\makeparesseother` This macro gives the catcode *other* to the character §. It is the 'contrary' of the preceding one. It corresponds to `\makeatother`.

This macro is inactivated when one uses a utf-8 encoding with LaTeX. In such a case it wouldn't have a clear meaning. When used it issues a warning in the `.log` file.

`\ActiveLaParesse` This macro makes § active and thus enable one to access the macros the name of which begins with § such as `§a`. A list of these macros and theirs meanings is given in the tables 5.1 and 5.2.

`ParesseActive` In this environment § is active and one can use the §-macros. One could use this environment if one want to use the §-macros when the package `paresse` is loaded whith the option `tame`.

5 Tables of the Macros

5.1 paresse's Original Encoding

This is the active encoding when one choses the options LEGACY and TTHETA which are the default.

This version 5.0 adds ς obtained with `§j`.

§a	α	§b	β	§g	γ	§d	δ
§e	ε	§z	ζ	§h	η	§v	θ
§i	ι	§k	κ	§l	λ	§m	μ
§n	ν	§x	ξ	§p	π	§r	ρ
§s	σ	§y	τ	§u	υ	§f	φ
§c	χ	§q	ψ	§w	ω	§j	ς
§G	Γ	§D	Δ	§V	Θ	§L	Λ
§X	Ξ	§P	Π	§S	Σ	§U	Υ
§F	Φ	§Q	Ψ	§W	Ω	§Z	§

§a	α	§b	β	§c	χ	§d	δ	§e	ε	§f	φ
§g	γ	§h	η	§i	ι	§j	ς	§k	κ	§l	λ
§m	μ	§n	ν	§o		§p	π	§q	ψ	§r	ρ
§s	σ	§t	θ	§u	υ	§v	θ	§w	ω	§x	ξ
§y	τ	§z	ζ	§A		§B		§C		§D	Δ
§E		§F	Φ	§G	Γ	§H		§I		§J	
§K		§L	Λ	§M		§N		§O		§P	Π
§Q	Ψ	§R		§S	Σ	§T	Θ	§U	Υ	§V	Θ
§W	Ω	§X	Ξ	§Y		§Z	§				

Remarks : all the latin letters used in the name of the §-macros, but for θ, τ, ψ and ς, are loaded with reminiscences, I hope `:-)` and the greek uppercases are obtained with the (latin) corresponding uppercases.

5.2 Sylvio Levi's Encoding

One make this encoding active with the option LEVI.

§a	α	§b	β	§g	γ	§d	δ
§e	ε	§z	ζ	§h	η	§j	θ
§i	ι	§k	κ	§l	λ	§m	μ
§n	ν	§x	ξ	§p	π	§r	ρ
§s	σ	§t	τ	§u	υ	§f	φ
§q	χ	§y	ψ	§w	ω	§c	ς
§G	Γ	§D	Δ	§J	Θ	§L	Λ
§X	Ξ	§P	Π	§S	Σ	§U	Υ
§F	Φ	§Y	Ψ	§W	Ω	§Z	§

Sylvio LEVI's encoding gives a direct acces to `\varsigma` (ς) with χ and is different from the original encoding just for the letters θ, τ, χ et ψ. Here is a summary of theses differences:

greek letters	θ	τ	χ	ψ	Θ	Ψ	ς
original encoding	§v/§t	§y/§t	§c	§q	§V/§T	§Q	§j
S. LEVI's encoding	§j	§t	§q	§y	§J	§Y	§c

References

[1] T. LACHAND-ROBERT. *La maîtrise de TEX et LATEX*. Masson, Paris, Milan, Barcelone, 1995. ISBN : 2-225-84832-7.

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