## The package paresse\*†

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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  $\S$  activated and redefined. Instead of \(\alpha\) one types  $\S$ a to obtain  $\alpha$ .

The code is not commented in English any more. Sorry. See the French documentation for French commented code in paresse.pdf.

#### Résumé

La documentation française pour l'utilisateur de l'extension paresse est désormais disponible sous le nom de paresse-fr.pdf.

Le fichier paresse.pdf contient le code commenté en français.

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<sup>\*</sup>This document corresponds to the file paresse.sty v3, dated 2010/03/21.

 $<sup>^\</sup>dagger \mathrm{English}$  translation by the author. Any comment about the translation is welcome.

### 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...

### 2 Why a 3rd Version?

With a mail dated march, 3, 2003, Claudio Beccari kindly informed me that there was an encoding of the greek alphabet with latin letters some 15 years before I committed this extension. This encoding was devised by Sylvio Levi who, at the time, was designing the first greek font for TeX, using the correspondence 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 have a name which begins with \GA@; the .dtx file is reorganised to facilitate the translation of the documentation.

### 3 Usage

One loads the package with \usepackage{paresse} after the package inputenc. The sign \unders must be recognised as a letter by TeX. On can use for instance inputenc with option latin1 for such a purpose.

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  $\S a$  in to obtain  $\alpha$ . 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 3.3.1 and 3.3.2. One obtains  $\alpha^{\beta}$  with \(\sa^{\\$b}\) when \(\\$ is active. One will note that, if the package amsmath is loaded, the curly braces are *not* compulsory and that one obtains the same result with just \(\\$a^\\$b\).

### 3.1 Options

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.

 $\frac{N}{\text{LEGACY}}$  LEVI

• Levi is the contrary of Legacy which is the default. With Legacy one uses the original encoding of paresse.sty as it is given by the table 3.3.1. If the option Levi is enforced, one uses the Sylvio Levi encoding, see the table 3.3.2.

• TTAU is the contrary of TTHETA which is selected by default. When TTHETA

TTAU / TTHETA

is active \$t gives  $\theta$  in the contrary \$t gives  $\tau$ . In all cases,  $\theta$  is given by \$v

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and  $\tau$  by §y. That option is ineffective when one has chosen Levi. **Remark:** when one has chosen the option Legacy,  $\Theta$  is 'regularly' obtained with §V and *also* with §T whatever is the chosen option. In the case

EPSILON / VAREPSILON

- of the option Levi, \$V doesn't correspond to any greek letter.

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

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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.

### 3.2 Commands and Environment

EPSILON, Se gives  $\epsilon$  otherwide Se gives  $\epsilon$ .

\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.

\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 3.3.1 and 3.3.2.

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.sty is loaded whith the option tame.

### 3.3 Tables of the Macros

#### 3.3.1 paresse.sty's Original Encoding

This is the active encoding when one choses the option LEGACY which is the default.

| §a | $\alpha$      | §b | β        | §g | $\gamma$ | §d | $\delta$           |
|----|---------------|----|----------|----|----------|----|--------------------|
| §e | $\varepsilon$ | §z | ζ        | §h | $\eta$   | §v | $\mid \theta \mid$ |
| §i | $\iota$       | §k | $\kappa$ | §1 | λ        | §m | $\mu$              |
| §n | $\nu$         | §x | ξ        | §p | $\pi$    | §r | $\rho$             |
| §s | $\sigma$      | §y | au       | §u | v        | §f | $\varphi$          |
| §c | $\chi$        | §q | $ \psi $ | Sw | $\omega$ |    |                    |
| §G | Γ             | §D | $\Delta$ | §V | Θ        | §L | $\Lambda$          |
| §Χ | Ξ             | §P | П        | §S | Σ        | §U | Υ                  |
| ŞF | Φ             | §Q | Ψ        | SW | Ω        |    |                    |

**Remarks:** all the latin letters used in the name of the §-macros, but for  $\theta$ ,  $\tau$  and  $\psi$ , are loaded with reminiscences, I hope :-) and the greek uppercases are obtained with the (latin) corresponding uppercases.

### 3.3.2 Sylvio Levi's Encoding

One make this encoding active with the option Levi.

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| §a | $\alpha$ | §b | β        | §g | $\gamma$ | §d | $\delta$  |
|----|----------|----|----------|----|----------|----|-----------|
| Şe | ε        | §z | ζ        | §h | $\eta$   | §j | $\theta$  |
| Şi | ι        | §k | $\kappa$ | §1 | λ        | §m | $\mu$     |
| §n | $\nu$    | Şx | ξ        | §p | $\pi$    | §r | $\rho$    |
| §s | $\sigma$ | §t | $\tau$   | §u | v        | §f | $\varphi$ |
| §q | $ \chi $ | §y | $\psi$   | Sw | $\omega$ | §c | ς         |
| §G | Γ        | §D | $\Delta$ | §J | Θ        | §L | $\Lambda$ |
| §Χ | []       | §P | П        | §S | Σ        | §U | Υ         |
| ŞF | Φ        | §Υ | Ψ        | ŞW | Ω        |    |           |

Sylvio Levi's encoding gives a direct acces to  $\forall$  arsigma ( $\varsigma$ ) with  $\S$ c and is different from the original encoding just for the letters  $\theta$ ,  $\tau$ ,  $\chi$  et  $\psi$ . Here is a summary of theses differences:

| greek letters      | $\theta$ | $\tau$ | χ  | $\psi$ | Θ     | Ψ  | ς  |
|--------------------|----------|--------|----|--------|-------|----|----|
| original encoding  | §v/§t    | §y/§t  | §с | §q     | §V/§T | §Q | _  |
| S. Levi's encoding | §j       | §t     | §q | §у     | §J    | §Υ | §с |

### References

[1] T. LACHAND-ROBERT. La maîtrise de T<sub>E</sub>X et L<sup>A</sup>T<sub>E</sub>X. Masson, Paris, Milan, Barcelone, 1995.

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