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 § activated and redefined. Instead of `\(\alpha\)` one types `§a` to obtain α.

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 anglais.

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*This document corresponds to the file paresse v4, dated 2011/04/19.
†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 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 — Christian Tellechea wrote me that he would be glad to use paresse in his utf-8 encoded sources with LATEX — not with XƎLATEX 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 XƎLATEX 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`.

N (v4) 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".

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 have a name which begins with `\GA@`; the `.dtx` file is reorganised to facilitate the translation of the documentation.

4 Usage

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

N (v4) One will obtain the same behaviour, but for the exception pointed out on page 3, with inputenc and option `utf8`.

N (v4) 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 4.3.1 and 4.3.2. One obtains α^β with `\(§a^{§b}\)` when § is active.

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.

4.1 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.

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 4.3.1. If the option LEVI is enforced, one uses the Sylvio LEVI encoding, see the table 4.3.2.

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 VAR-THETA; 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.

4.2 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 4.3.1 and 4.3.2.

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.

4.3 Tables of the Macros

4.3.1 paresse.sty's Original Encoding

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

§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		
§G	Γ	§D	Δ	§V	Θ	§L	Λ
§X	Ξ	§P	Π	§S	Σ	§U	Υ
§F	Φ	§Q	Ψ	§W	Ω	§Z	§

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

4.3.2 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 §c 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	—
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.
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Numbers written in italic refer to the page where the corresponding entry is described; numbers underlined refer to the code line of the definition; numbers in roman refer to the code lines where the entry is used.