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## Reflections on the history of the L<sup>A</sup>T<sub>E</sub>X Project Public License (LPPL) — A software license for L<sup>A</sup>T<sub>E</sub>X and more

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### Abstract

In August 2010 the L<sup>A</sup>T<sub>E</sub>X Project Public License (LPPL) was finally listed by the Open Source Initiative (OSI) as a free software license. This marks the endpoint of a long set of discussions around the T<sub>E</sub>X community’s predominant license.

This article reflects on the history of the license, the way it came about, and the reasons for its development and content. It explains why it was chosen even though alternative free licenses have been available at least from 1990 onwards.

### Contents

1	Introduction: Why a special license?	83
1.1	The early days of the T <sub>E</sub> X community . . .	83
1.2	Digression: The multicol license . . . . .	84
1.3	The GNU GPL — A new star on the horizon	84
1.4	The move from L <sup>A</sup> T <sub>E</sub> X 2.09 to L <sup>A</sup> T <sub>E</sub> X 2 <sub>ε</sub> . . .	85
1.5	Challenged by GPL evangelists . . . . .	86
2	The evolution of the LPPL	87
2.1	An attempted cleanup . . . . .	87
2.2	Digression: The GNU T <sub>E</sub> X 0.x project . . .	87
2.3	The issue with unmaintained packages . . .	88
2.4	The Debian dispute . . . . .	88
2.5	OSI certification . . . . .	89
3	Conclusions	89
3.1	Thanks . . . . .	90
A	References	90
B	The L <sup>A</sup> T <sub>E</sub> X Project Public License	91

## 1 Introduction: Why a special license?

### 1.1 The early days of the T<sub>E</sub>X community

When Donald Knuth in 1982 published the T<sub>E</sub>X program it was one of the first, if not indeed the first, major program to be published as documented source in its entirety. As such it forms an early example of “free software”, well before this term was more formally defined by Richard Stallman in the free software movement, and well before one of the most influential free software licenses — the GNU GPL — was released in 1989.

Instead of a more elaborate license the source of the T<sub>E</sub>X program contained (and still contains) the interesting copyright and license information shown in Figure 1 on the following page. The motivation for this small set of clauses was to ensure that documents written for the T<sub>E</sub>X engine would be readable for the foreseeable future and indeed, T<sub>E</sub>X and its extensions

still compile documents written in the early 1980s and produce output exactly as intended.

In those days, when the T<sub>E</sub>X community was born, the Internet was mainly restricted to academics and used for knowledge sharing. Commercial aspects hadn’t yet entered the space and spam wasn’t a known phenomenon. As a result, not much got formalized and there was a general trust that others would respect your ideas and would together help in improving and developing them. People spent countless hours on developing code and ideas and made them available (typically free of charge) to others. Most people didn’t bother with any formal copyright notice, some had statements like “Copyright *date name* All rights reserved” while others explicitly placed their work in the “public domain”.

Legally, all such works that were developed without granting explicit rights to others (e.g., by stating those rights in a license, or by placing the material into the public domain), didn’t offer anybody a right to work with the material, or to use it for private or commercial purposes without explicitly obtaining this right from the copyright holder. So the simple copyright line “Copyright (C) 1992 by Leslie Lamport” (from the old L<sup>A</sup>T<sub>E</sub>X 2.09 sources) could probably have been used to go after anybody who made use of L<sup>A</sup>T<sub>E</sub>X whether for their PhD or for typesetting books for publication and sale.

But of course, nobody understood those lines in this way. They were correctly understood<sup>1</sup> as only marking the intellectual ownership of the code but in the mind of the community and, I would think, in the minds of most if not all of the developers, not as a mechanism to restrict any “proper” use of the material. Now the interesting part here is “proper”: as most people spent considerable free time in developing their work, there was a base assumption in the community (and other software communities) that while such work should be freely available, those that use it should also in one way or the other contribute to the whole setup. Commercial use was frowned upon by most as a way to take away the work of others for profit without a benefit for the community, so (not surprisingly) after a while works appeared that explicitly stated “Freely usable for non-commercial usage”, or “Commercial use not allowed” in addition to a copyright notice.

Again, I would claim, back then nobody really understood the implications and the legal situation created with such statements — I certainly didn’t when I developed my first packages for L<sup>A</sup>T<sub>E</sub>X; I

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<sup>1</sup> In a legal sense this isn’t the correct interpretation as just explained.

```
% This program is copyright (C) 1982 by D. E. Knuth; all rights are reserved.
% Copying of this file is authorized only if (1) you are D. E. Knuth, or if
% (2) you make absolutely no changes to your copy. (The WEB system provides
% for alterations via an auxiliary file; the master file should stay intact.)
% See Appendix H of the WEB manual for hints on how to install this program.
% And see Appendix A of the TRIP manual for details about how to validate it.
```

Figure 1: License of  $\text{\TeX}$ , the program [3]

simply copied such lines that I had seen in other works. Especially a statement like “No commercial use allowed” was way over the top, since everybody was happy if his or her package got used to produce fine books or published articles and in most cases that meant the work was commercially used.

### 1.2 Digression: The `multicol` license

The fact that such statements were not a dull sword was something I learned to my surprise at one point when I got approached by somebody for special extensions to `multicol` which took me quite some time to implement. At several points in the discussions I asked about the background for the requests and finally got told that they had no intention of telling me or anybody or making any of their part of the work available to others as they wanted to make money from it and that I should stop bothering them. The way this was done got me slightly mad and so I pointed out “heh, have you read the license statement on `multicol` about commercial usage not being allowed?” That made the email correspondence come to an abrupt halt for a moment and then a day or two later I had the company lawyers asking for my phone number in Germany to discuss this and reach some settlement and license agreement. Well, I was certainly young and naive back then<sup>2</sup> so I didn’t come out rich from this and probably wouldn’t have either way, but it sure felt good that I had a lever to stop being taken for an absolute imbecile that could be made to work for free under false premises.

This was about the first time I got some awareness about the importance and power of licenses as well as of the fact that what was out there wasn’t really what people intended. As I wasn’t interested in making money from  $\text{\LaTeX}$  software and normally would have wanted to use my stuff freely and free of charge, some refinements were really in order. Thus, about to sell my soul and negotiate a special license with this company I had to come up with some idea of an acceptable license (including a license fee). I ended up with a sort of psychological experiment, which was partly my coward’s way out of not wanting to deal with license fees and partly some genuine

interest on what would happen. The result was perhaps the most curious license ever drawn up in that I required for certain commercial usages of `multicol` the licensee to determine the importance of it for his or her circumstances and determine the license fee from that.

I must say that the experiment as such was a success as it provided me with some interesting insights into human psychology, though I can’t recommend it to anybody who wants to make money from software or other works. Not that I want to imply that no license fees got paid: over the years I got a number of nice presents, a book in Japanese (with a 100 Deutschmark note inside I nearly overlooked as it was hidden and nowhere mentioned), and a few other things, so all in all, some pleasant surprises.

Somewhere around 2000 I changed the license for `multicol` to the LPPPL but to honor the history (and to continue the experiment) I kept the previous license now toned down to a “Moral Obligation” so people are free to ignore it completely if they wish to, while previously they were only free to set the fee to zero by stating that this is the value they attach to their use of `multicol`.<sup>3</sup>

### 1.3 The GNU GPL — A new star on the horizon

Returning back to history: in 1989 Richard Stallman published the first version of the GPL (General Public License) [1] for use with programs released as part of the GNU project. Richard intended the GPL to become a license that could be used with any free software project and in that he spectacularly succeeded (Wikipedia reports for 2007 a penetration of roughly 70% on major sites such as `SourceForge.net`). Since its first introduction the use of the GPL in the free software development communities increased steadily to reach these impressive figures, especially in communities that were concerned with developing programs for individual use. The strong copyleft [2] provided by the GPL gave the programmer who used the license the confidence that their work would benefit the whole world and any future development

<sup>3</sup> Interested people can find the wording of this “Moral Obligation” at the top of the `multicol.sty` or `.dtx` file [4]. It is nearly identical to the earlier license statement.

<sup>2</sup> I can report the first attribute has changed since then.

*Our aim is that L<sup>A</sup>T<sub>E</sub>X should be a system which can be trusted by users of all types to fulfill their needs. Such a system must be stable and well-maintained. This implies that it must be reasonably easy to maintain (otherwise it will simply not get maintained at all). So here is a summary of our basic philosophy:*

*We believe that the freedom to rely on a widely-used standard for document interchange and formatting is as important as the freedom to experiment with the contents of files.*

*We are therefore adopting a policy similar to that which Donald Knuth applies to modifications of the underlying T<sub>E</sub>X system: that certain files, together with their names, are part of the system and therefore the contents of these files should not be changed unless the following conditions are met:*

- *they are clearly marked as being no longer part of the standard system;*
- *the name of the file is changed.*

*In developing this philosophy, and the consequent limitations on how modifications of the system should be carried out, we were heavily influenced by the following facts concerning the current widespread and wide-ranging uses of the L<sup>A</sup>T<sub>E</sub>X system.*

1. *L<sup>A</sup>T<sub>E</sub>X is not just a document processing system; it also defines a language for document exchange.*
2. *The standard document class files, and some other files, also define a particular formatting of a document.*
3. *The packages that we maintain define a particular document interface and, in some cases, particular formatting of parts of a document.*
4. *The interfaces between different parts of the L<sup>A</sup>T<sub>E</sub>X system are very complex and it is therefore very difficult to check that a change to one file does not affect the functionality of both that file and also other parts of the system not obviously connected to the file that has been changed.*

**Figure 2:** Excerpts from the 1995 document “Modifying L<sup>A</sup>T<sub>E</sub>X” [5]

based on their code would remain free, rather than being exploited by software companies that would not return anything back to the community.

Within the T<sub>E</sub>X — and especially L<sup>A</sup>T<sub>E</sub>X — community, however, the GPL played only a niche role.<sup>4</sup> The community starship, the T<sub>E</sub>X program itself, came with its own very specific license “change my name if you want to change me” and many people (if they had bothered with some explicit license at all) had adopted a similar approach or had used lines like “freely usable for non-commercial purposes” as explained earlier.

#### 1.4 The move from L<sup>A</sup>T<sub>E</sub>X 2.09 to L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>

In 1993 the L<sup>A</sup>T<sub>E</sub>X project released a fundamentally

new version of L<sup>A</sup>T<sub>E</sub>X. This new version (L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub>) for the first time got an explicit license in the form of a file called `legal.txt` which inside had the title “L<sup>A</sup>T<sub>E</sub>X 2<sub>ε</sub> Copyright, Warranty and Distribution Restrictions”. One can think of this file as the very first version of the LPPL, though it wasn’t called that in those days and it was a lot simpler than the license under which L<sup>A</sup>T<sub>E</sub>X is made available today.

Perhaps the most important aspect of it (which later on also turned out to produce the biggest controversy) was the list of restrictions that apply when producing changed versions of files from the L<sup>A</sup>T<sub>E</sub>X system, the most prominent being

*\* You rename the file before you make any changes to it.*

This was directly modeled after Don Knuth’s license for T<sub>E</sub>X and within the T<sub>E</sub>X community there was broad consensus this was an adequate approach to balance between the freedom of the individual to be able to reuse and modify the code if so desired and the importance of L<sup>A</sup>T<sub>E</sub>X as a communication language where people relied on being able to faithfully reproduce a document written in one place elsewhere.

<sup>4</sup> This situation has changed only marginally over time. The majority of the packages for L<sup>A</sup>T<sub>E</sub>X now use the LPPL for their license, though many of the executable support programs and some package use the GPL. More precisely, in October 2010 we had 3849 products/packages listed on CTAN of which 592 (i.e., about 15%) were distributed under GPL and 1751 (i.e., about 45%) used the LPPL; the remainder (many of them fonts) had other licenses. And even if you just look at non-L<sup>A</sup>T<sub>E</sub>X works, this means the GPL is used by about 28% so still significantly less than in other free software communities.

*This license is an incomplete statement of the distribution terms for L<sup>A</sup>T<sub>E</sub>X. As far as it goes, it is a free software license, but incompatible with the GPL because it has many requirements that are not in the GPL.*

*This license contains complex and annoying restrictions on how to publish a modified version, including one requirement that falls just barely on the good side of the line of what is acceptable: that any modified file must have a new name.*

*The reason this requirement is acceptable for L<sup>A</sup>T<sub>E</sub>X is that T<sub>E</sub>X has a facility to allow you to map file names, to specify “use file bar when file foo is requested”. With this facility, the requirement is merely annoying; without the facility, the same requirement would be a serious obstacle, and we would have to conclude it makes the program non-free.*

*The LPPL says that some files, in certain versions of L<sup>A</sup>T<sub>E</sub>X, may have additional restrictions, which could render them non-free. For this reason, it may take some careful checking to produce a version of L<sup>A</sup>T<sub>E</sub>X that is free software.*

**Figure 3:** Excerpts from Richard Stallman’s analysis of LPPL 1.2 [6]

### 1.5 Challenged by GPL evangelists

While the T<sub>E</sub>X community was content with the status quo, people in the “GPL” world who used T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X felt uncomfortable with the licenses in use and started to lobby for using the GPL within the T<sub>E</sub>X community, as they felt that it was an unjustified restriction to be forced to change a file name prior to making changes to it. The GPL doesn’t pose any such restriction: you can modify a work and distribute it without providing any easy visible clue to its changed content.<sup>5</sup>

In essence two different world views on what is “free software” and who should have what rights clashed head-on for the first time. The GPL view is largely focused on the individual programmer, with the purpose of the GPL being to offer him or her a maximum of rights on using and manipulating the work as well as ensuring that such rights can’t subsequently be taken away. On the other hand, the T<sub>E</sub>X program license and later the LPPL acknowledged the fact that T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X defined a language for communication and that the definition of such a language needs to remain stable to serve as the means of communication, i.e., it tried to achieve a balance between the individual right of a programmer to freely use the work and the community right of the users of this language to rely on the work to be faithfully representing the language itself and thus making communication possible.

<sup>5</sup> This is an oversimplification, as the GPL requires that “You must cause the modified files to carry prominent notices stating that you changed the files and the date of any change.” However, in a context like L<sup>A</sup>T<sub>E</sub>X where many files are loaded in the background, this would mean a user would need to check hundreds of files for modification information to ensure that he or she is using the official versions when they get loaded by `\usepackage` etc. In contrast, if a file name change in case of modifications is required then this problem vanishes as the documents by themselves identify what they expect.

In response to suggestions that the modification and distribution conditions for the files constituting the L<sup>A</sup>T<sub>E</sub>X system should be similar to those implied by Version 2 of the GPL, the L<sup>A</sup>T<sub>E</sub>X project team published the document “Modifying L<sup>A</sup>T<sub>E</sub>X” [5] in an attempt to clarify the position of the L<sup>A</sup>T<sub>E</sub>X Project team and to explain the rationale behind the license decision. Some relevant excerpts from this document are shown in Figure 2 on the previous page. The document also gave explicit guidance on how to freely change a L<sup>A</sup>T<sub>E</sub>X system in any way desired, either through customization or — if really needed — through producing a new system only based on the L<sup>A</sup>T<sub>E</sub>X code.

In 1995 Chris Rowley and I also met face to face with Richard Stallman to discuss the Free Software Foundation (FSF) concerns about the L<sup>A</sup>T<sub>E</sub>X license and as a result of this meeting and some subsequent email discussions (in which we discussed a number of aspects of the license and clarified or changed several of them), Richard acknowledged L<sup>A</sup>T<sub>E</sub>X (and its at that point somewhat incomplete license statement) as free software.<sup>6</sup>

Nevertheless, Richard made it very clear that he didn’t like the approach taken by T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X and published his viewpoint as an analysis of the license on the GNU web pages [6] of which excerpts are shown in Figure 3. (The current page states that

<sup>6</sup> Looking through my email archives I found the following beauty from the end of this discussion (the slanted text is from Richard, the reply was from some member of the L<sup>A</sup>T<sub>E</sub>X project team who shall go unnamed):

*Ok, I believe that the methods you’ve described for modifying LaTeX 2e are adequate, so that LaTeX 2e can be considered free software.  
Hoorah hooray, let the jubilation commence!  
LaTeX is free software after all!*

— as it turned out, this conclusion was a bit premature.

this analysis applies to LPPL 1.2, but the excerpt more or less corresponds to the wording that was on the GNU web site at the time.)

I'm not going to attempt to defeat his points here, some are certainly well taken and others are a matter of opinion and anyway, time has moved on because the license text has greatly evolved from the `legal.txt` of 1993, via LPPL 1.0 in early 1999, to LPPL 1.2<sup>7</sup> at the end of 1999, and ultimately to LPPL 1.3 in 2003.

## 2 The evolution of the LPPL

### 2.1 An attempted cleanup

In the years between 1995 and 1999 a lot of new software got written for L<sup>A</sup>T<sub>E</sub>X and other flavors of T<sub>E</sub>X. Most of this software was made available through CTAN (the “Comprehensive T<sub>E</sub>X Archive Network”) and regularly through T<sub>E</sub>X distributions such as “T<sub>E</sub>X Live” or teT<sub>E</sub>X. One growing problem faced by these distributions was the number of different licenses under which all such packages in the distribution were made available. L<sup>A</sup>T<sub>E</sub>X core had its `legal.txt` but everything else had its own license and though there was the general belief that all or most of it was free software, depending on the viewpoint this wasn't true. In many cases, different strings were attached to individual packages so that a user of, say, L<sup>A</sup>T<sub>E</sub>X would have been required to look into every package used to understand what he or she was allowed to do with it.

So in 1998 or thereabouts, an attempt was made to ease this situation: People wanted to produce a “free” T<sub>E</sub>X distribution for Debian, and to make such a distribution in any way useful it was necessary to ask for license changes in many packages or otherwise exclude them as “non-free”. This was quite a heroic act undertaken by a few individuals<sup>8</sup> in their spare time, as it often involved tracking down package authors that had moved on to other pastures and had completely forgotten that they had written some T<sub>E</sub>X or L<sup>A</sup>T<sub>E</sub>X package in their former lives. (According to Karl Berry this kind of work continues to this day, as legal terms unique to a given package continue to be discovered, despite efforts at comprehensive reviews.)

During that time the idea came up to turn L<sup>A</sup>T<sub>E</sub>X's `legal.txt` into a generally usable license,

<sup>7</sup> LPPL 1.1 lived for a very short time with only minor differences in wording, but not content, from 1.2 — in essence we had to get our act together and that took some attempts and some time.

<sup>8</sup> Names that stick out in my memory are Sebastian Rahtz and Thomas Esser, though I'm sure others have helped too.

so that package authors could simply refer to it as the license they use for their works. So this was the underlying reason for the attempt to write up the LPPL and in March 1999 version 1.0 of this license was made publicly available. But as you can imagine, writing a license is a nontrivial act, thus we had many discussions on how to express the intent behind the license with the result that in fairly rapid succession (all still in 1999) versions 1.1 and 1.2 appeared. Looking back, the changes we made from `legal.txt` via LPPL-1.0 to LPPL-1.1 to LPPL-1.2 were not all necessarily for the better, so some of Richard's criticism certainly holds true for these early attempts. What we changed for LPPL-1.3, with the help of some more legally trained people from Debian, was ultimately considerably more significant.

### 2.2 Digression: The GNU T<sub>E</sub>X 0.x project

Concurrently, but unrelated to the efforts mentioned earlier, the GNU project (that was also quite heavily using T<sub>E</sub>X in the form of Texinfo for documentation) got interested in shipping a “free T<sub>E</sub>X distribution” with the GNU software and was looking at which of the existing distributions might fit the bill — to which the answer was none.

As Richard later explained to us, he became exceedingly concerned that none of the major T<sub>E</sub>X distributions could be distributed by GNU so he approached Thomas Esser (maintainer of the teT<sub>E</sub>X distribution) to ask if it would be possible to separate the distribution into a free and a non-free part. Thomas said yes, but that this would take quite some time. So Richard asked within the GNU project if there would be people to help Thomas with this.

At this point somebody came forward and suggested that he would be interested but would prefer to build a new free distribution from scratch instead of helping to update teT<sub>E</sub>X. Richard gave his okay and as a result a T<sub>E</sub>X distribution called GNU T<sub>E</sub>X got produced. As it turned out (not really a surprise given the license situation in the T<sub>E</sub>X world) the first public beta of this distribution was very much crippled, but what made matters worse was that it completely ignored the existing license conditions of the packages it included, for example, by not distributing the L<sup>A</sup>T<sub>E</sub>X source documentation, i.e., its `.dtx` files.

When this became known to the L<sup>A</sup>T<sub>E</sub>X project, David Carlisle tried to reason with the maintainer of this new distribution and asked him to update it. Unfortunately this resulted in very strange statements, such as that he would remove files written by David and have people “write free replacements” for them,

continuing to bluntly disregard the L<sup>A</sup>T<sub>E</sub>X license details that stated that L<sup>A</sup>T<sub>E</sub>X had to be distributed as a whole.

It came to a climax with some messages making personal comments against the L<sup>A</sup>T<sub>E</sub>X developers, and in particular David. At this time I joined this debate by asking Richard if this person was really speaking for GNU, expressing my belief that if that was indeed the case, then this would show that the free software movement was in parts in a very sorry state. In a very personal email Richard replied with an apology for the damage that has been done in the name of the GNU project and in particular the verbal insults that some of the senior members of the L<sup>A</sup>T<sub>E</sub>X project team had to endure while defending some core rights for which the GNU project and the FSF were actually fighting. After some further discussions, to get to the bottom of the dispute he ensured that GNU<sub>T</sub>E<sub>X</sub> was taken off the archives and that was the end of it.

What I took away with me from that episode was that it is unfortunately very easy get carried away with the idea that “free” means that others have no rights worth preserving.

### 2.3 The issue with unmaintained packages

By the turn of the century many people thought that the fight over licenses in the T<sub>E</sub>X world was over. T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X and many other packages had licenses that were accepted as “free software licenses” by the FSF and more and more authors of packages with questionable licenses changed them or simply placed their work under the LPPL from the beginning.

However, we now started to realize that the LPPL in itself posed a problem for packages that lost their author/maintainer because he or she lost interest in the work or passed away as it sadly happened in some cases. As the LPPL required a name change in case of modification, a new maintainer of a previously unmaintained package couldn't fix bugs or extend the functionality without changing its name. In this way, perfectly good names could get lost for the L<sup>A</sup>T<sub>E</sub>X language — just because of the attempt to preserve the language integrity in the first place.

So in 2002 the idea was born to modify the LPPL once more by including a maintenance clause that would allow a person under certain circumstances (normally when a work was orphaned) to take over maintenance and in some sense ownership. The clause was written in a way such that it was up to the author of a work to allow or prevent this clause to apply.

On the whole I believe that this proposed license extension was a good idea as it further helped to

stabilize L<sup>A</sup>T<sub>E</sub>X as a reliable language. But it had an unfortunate<sup>9</sup> side effect that everybody interested in free software licenses started to take another look at the LPPL.

The first person to ask was Richard, and I sent him a draft of the intended changes and explained their intentions. His reply was that he saw no issue with any of them.

### 2.4 The Debian dispute

While a new draft of the LPPL that contained a first version of the maintainers clause got discussed on the L<sup>A</sup>T<sub>E</sub>X project list one of its subscribers, Claire Connelly, explained that within the Debian community some people were unhappy about the L<sup>A</sup>T<sub>E</sub>X license and considered it nonfree (proposing to ban L<sup>A</sup>T<sub>E</sub>X from Debian distributions). She volunteered to initiate a license review on the Debian-legal list so that any issues with the license would be moved from the level of vague rumor to a level of facts that could be discussed intelligently.

However, a bit of a pity was that the first draft of LPPL-1.3 got presented which was not very clear, and thus added to the underlying misunderstandings rather than helping to clear them up. For example, one of the initial reviews remarked: “so my one-line summary of the license would be ‘We hate forking’” which doesn't even remotely represent the intentions behind the license. Eventually, all such misunderstandings got resolved, but it took considerable effort. To be more precise, it took roughly 1600 messages (between July 2002 and June 2003) on the `debian-legal` list and elsewhere to sort them out and improve the wording to what in the end became LPPL-1.3.

In retrospect it turned out to be fairly difficult to identify the core reasons that led to this massive email exchange but from recollections there have been two major sources: textual and legal deficiencies in the license as such, and a head-on clash between different interpretations of “freedom”. As a result, the discussions on Debian-legal were essentially with two only partly overlapping factions: a group of people who seriously wanted to understand the intentions behind the license and who where interested in providing guidance on how to improve it, while ensuring that it would meet the DFSG (Debian Free Software Guidelines), and a second group of people largely concerned about the rights of the programmer to modify code ad lib without any restrictions. The tenor here was “a requirement to rename is a

<sup>9</sup> Or perhaps fortunate when looking at the final outcome. However, if I would have known beforehand the amount of work that it took to get there, I would have let things lie.

restriction” and therefore unacceptable. In other words, an important requirement for “freedom” was the ability to modify some work in situ. For many situations this is an understandable requirement, e.g., when fixing bugs or when extending functionality. It does, however, become a bit blurry when modifications result in changing expected behavior. In that case one can argue that there is also the right of the recipient/user of the work to consider: to not be deliberately misled.

As an example, an interesting thread within the discussions spawned from a statement made by Boris Veytsman: “I am FOR the freedom of speech. However, I am against the freedom of my grocer to call a 950g weight ‘a kilogram’.” The replies were interesting and ranged from the opinion that the Debian project has no intention of supporting deliberate fraud (i.e., in this respect supporting his position) all the way to the claim that this would be acceptable behavior and needs to be supported in the spirit of freedom. Clearly there isn’t any way to bridge the chasm between such widely different opinions with a license text and that was not attempted, though quite some energy was used on either side to argue the respective positions.

Leaving aside the discussions around the more extreme positions, the core point of dispute was the attempt of the LPPL to protect L<sup>A</sup>T<sub>E</sub>X as a language for interchange. By the nature of the beast this means acknowledging that in L<sup>A</sup>T<sub>E</sub>X file names of packages, classes, etc., are part of the (extensible) L<sup>A</sup>T<sub>E</sub>X language, i.e., each package extends or alters the language and its name together with its functionality becomes part of L<sup>A</sup>T<sub>E</sub>X when it is loaded. That is, by `\usepackage{name}` the user requests a certain package with a specific behavior upon which his document then relies.

To continue the above analogy, when a user loads the hypothetical package *weights* for typesetting grocery data then his document should not typeset 1kg at some installations, but 950g at others, as that would render L<sup>A</sup>T<sub>E</sub>X as a language useless.

In the end we settled for a toned down version of this requirement: although the L<sup>A</sup>T<sub>E</sub>X Project still strongly recommends a name change in case of modifications, the license alternatively allows for producing in situ modifications of components provided the derived work clearly and unambiguously identifies itself as a modified version of the original component to the user when used interactively in the same way the original component would identify itself to the user (Clause 6a of the license). In the case of a L<sup>A</sup>T<sub>E</sub>X package that would typically be achievable through an appropriate change of the `\ProvidesPackage` decla-

ration. However, the L<sup>A</sup>T<sub>E</sub>X project team still recommends to use the name change approach and within the T<sub>E</sub>X community this is the predominantly used method. Whenever documents are intended to be exchanged this is the only safe way to ensure that your document typesets as intended and remains so over time. How powerful this approach is can be seen in the fact that with a few exceptions T<sub>E</sub>X and L<sup>A</sup>T<sub>E</sub>X documents from the last two decades can be still successfully typeset today.

Returning to the evolution of the license, on June 18th 2003 the Debian legal community agreed that LPPL 1.3 is a free software license with respect to the DFSG guidelines. This marked the endpoint of the active license development.

## 2.5 OSI certification

After the LPPL got accepted by Debian there was some discussion about submitting it also for approval through the Open Source Initiative, but effectively we had run out of steam. It would have meant (another) round of formal submissions and most likely discussions about wording and content and at least I didn’t feel up to it at that time. But it was a somewhat naggingly open issue that the license wasn’t certified by OSI, given that the LPPL codified the accepted behavior in a large and active free software community.

Fortunately, Will Robertson, a new member in the L<sup>A</sup>T<sub>E</sub>X project, took up that task and on the rather nice date 09/09/09 approval from the OSI was sought in the category: “Licenses that are popular and widely used or with strong communities”.

As it turned out my fears of a repetition of the DFSG experience were groundless; it took about two dozen email exchanges to get the license accepted without any request for modification and only about two months later on Wednesday, November 11, 2009 the OSI Board formally approved it [8]. It then took nearly another year until the Open Source Initiative updated their web site, but in August 2010 the license finally appeared there [9].

## 3 Conclusions

From the history it seems fairly obvious that there are a good number of reasons why it is helpful to have a fairly uniform license landscape in a community like the T<sub>E</sub>X world. Does it have to be the LPPL? That question is less clear and as the discussions above have shown a matter of opinion and controversy. But on the whole I believe the answer is yes; the time and effort was well spent and the community has benefitted from it.

On the surface, languages like Perl or Python have issues similar as L<sup>A</sup>T<sub>E</sub>X. So why doesn't L<sup>A</sup>T<sub>E</sub>X use the GPL as they do? I guess the answer lies in the unique elements in the structure and usage of L<sup>A</sup>T<sub>E</sub>X (and perhaps its community?). It consists of a very large and complete collection of third-party packages in its standard form of distribution and all of this forms the language which the community expects to be able to use interchangeably. The other important difference is that for a library in Perl or Python that implements a set of functions it is normally well understood what represents a "correct" implementation of these functions, e.g., a time conversion function or a mathematical formula is either implemented correctly or not — but it is not going to be a matter of "taste".

In the area of typography, however, "correctness" has no reasonable definition and so it is not surprising that people have different opinion on what looks good or how something should be improved. This is perfectly acceptable and in fact encouraged throughout the community but it needs to be channeled in order to maintain the other important aspect of the language: support for interchange. And that is something that the GPL and similar licenses aren't able to ensure, while the LPPL approaches, and, as we think, resolved that issue adequately.

One of the commenters for the OSI review remarked, "I think this license is trying to create or enforce a policy for maintainership more than it concerns itself with copying & use/patent issues. I'm not convinced that this is a good idea, but T<sub>E</sub>X has an active community and if this license seems to work out for them, my level of concern isn't so great that I would second-guess that aspect." He is probably right, as in the T<sub>E</sub>X community the copying & use/patent issues play a minor role compared to resolving how to best maintain the language as a whole. Thus the idea of a maintainer and its rights is quite prominent. We definitely think it helps in that people know they are allowed to take over an orphaned work — it would probably happen less if it weren't stated explicitly as a possibility.

Is the LPPL the best solution to the issues that a community like the T<sub>E</sub>X community encounters? I guess not, but it is the best that we have been able to come up with after many (perhaps too many) hours and attempts.

### 3.1 Thanks

A number of people from the T<sub>E</sub>X community and from the Debian legal community have been instrumental in helping to make LPPL a better license and I would like to thank them all — in particular I would

like to mention Jeff Licquia and Branden Robinson from Debian legal<sup>10</sup> with whom I had many fruitful discussions over ways to improve it and shape in a way that it properly expresses our intentions without conflicting with other people's thoughts on what comprises a free software license.

From the T<sub>E</sub>X community I'd like to thank all of my colleagues from the L<sup>A</sup>T<sub>E</sub>X project team, in particular David Carlisle and Chris Rowley who shouldered large proportions of the external discussions during those years. And a heartfelt thanks to Will Robertson who single-handedly got the license OSI-approved when the other team members had run out of steam to even attempt it.

Many other people from the T<sub>E</sub>X community contributed in one way or the other, be it on `latex-l`, `debian-legal`, or in private communication and it is impossible to list them all. As a representative of this huge group I should perhaps mention Boris Veytsman who wrote over one hundred messages on the subject during the debate with Debian.

Last not least I'd like to thank Richard Stallman for initiating the first round of discussions and drawing our intentions to the flaws of the initial license as well as opening at least my eyes to the complexity and difficulties behind free and open source software licensing.

◇ Frank Mittelbach  
L<sup>A</sup>T<sub>E</sub>X Project  
<http://www.latex-project.org>

## A References

- [1] The GNU GPL 1.0 can be found at: [www.gnu.org/licenses/old-licenses/gpl-1.0.txt](http://www.gnu.org/licenses/old-licenses/gpl-1.0.txt)
- [2] [en.wikipedia.org/wiki/Copyleft](http://en.wikipedia.org/wiki/Copyleft)
- [3] License for T<sub>E</sub>X at the top of [mirror.ctan.org/systems/knuth/dist/tex/tex.web](http://mirror.ctan.org/systems/knuth/dist/tex/tex.web)
- [4] Moral obligation clause for the `multicol` package at the top of [mirror.ctan.org/macros/latex/required/tools/multicol.dtx](http://mirror.ctan.org/macros/latex/required/tools/multicol.dtx)
- [5] The document "Modifying L<sup>A</sup>T<sub>E</sub>X": [mirror.ctan.org/macros/latex/doc/modguide.pdf](http://mirror.ctan.org/macros/latex/doc/modguide.pdf)
- [6] Comments on software licenses by the FSF: [www.gnu.org/licenses/license-list.html](http://www.gnu.org/licenses/license-list.html)
- [7] [lists.debian.org/debian-legal/](http://lists.debian.org/debian-legal/)
- [8] [opensource.org/minutes2009111](http://opensource.org/minutes2009111)
- [9] [www.opensource.org/licenses/lppl](http://www.opensource.org/licenses/lppl)

<sup>10</sup> There are a few more people from Debian legal should perhaps be named but any list would naturally be incomplete. For those interested I suggest reading through the `debian-legal` archives [7] from that time; you will find this a lengthy but illuminating read in parts.

## B The L<sup>A</sup>T<sub>E</sub>X Project Public License

*LPPL Version 1.3c 2008-05-04*

### Copyright 1999, 2002–2008 L<sup>A</sup>T<sub>E</sub>X3 Project

Everyone is allowed to distribute verbatim copies of this license document, but modification of it is not allowed.

#### Preamble

The L<sup>A</sup>T<sub>E</sub>X Project Public License (LPPL) is the primary license under which the L<sup>A</sup>T<sub>E</sub>X kernel and the base L<sup>A</sup>T<sub>E</sub>X packages are distributed.

You may use this license for any work of which you hold the copyright and which you wish to distribute. This license may be particularly suitable if your work is T<sub>E</sub>X-related (such as a L<sup>A</sup>T<sub>E</sub>X package), but it is written in such a way that you can use it even if your work is unrelated to T<sub>E</sub>X.

The section ‘WHETHER AND HOW TO DISTRIBUTE WORKS UNDER THIS LICENSE’, below, gives instructions, examples, and recommendations for authors who are considering distributing their works under this license.

This license gives conditions under which a work may be distributed and modified, as well as conditions under which modified versions of that work may be distributed.

We, the L<sup>A</sup>T<sub>E</sub>X3 Project, believe that the conditions below give you the freedom to make and distribute modified versions of your work that conform with whatever technical specifications you wish while maintaining the availability, integrity, and reliability of that work. If you do not see how to achieve your goal while meeting these conditions, then read the document ‘`cfgguide.tex`’ and ‘`modguide.tex`’ in the base L<sup>A</sup>T<sub>E</sub>X distribution for suggestions.

#### Definitions

In this license document the following terms are used:

**Work** Any work being distributed under this License.

**Derived Work** Any work that under any applicable law is derived from the Work.

**Modification** Any procedure that produces a Derived Work under any applicable law – for example, the production of a file containing an original file associated with the Work or a significant portion of such a file, either verbatim or with modifications and/or translated into another language.

**Modify** To apply any procedure that produces a Derived Work under any applicable law.

**Distribution** Making copies of the Work available from one person to another, in whole or in part. Distribution includes (but is not limited to) making any electronic components of the Work accessible by file transfer protocols such as FTP or HTTP or by shared file systems such as Sun’s Network File System (NFS).

**Compiled Work** A version of the Work that has been processed into a form where it is directly usable on a computer system. This processing may include

using installation facilities provided by the Work, transformations of the Work, copying of components of the Work, or other activities. Note that modification of any installation facilities provided by the Work constitutes modification of the Work.

**Current Maintainer** A person or persons nominated as such within the Work. If there is no such explicit nomination then it is the ‘Copyright Holder’ under any applicable law.

**Base Interpreter** A program or process that is normally needed for running or interpreting a part or the whole of the Work.

A Base Interpreter may depend on external components but these are not considered part of the Base Interpreter provided that each external component clearly identifies itself whenever it is used interactively. Unless explicitly specified when applying the license to the Work, the only applicable Base Interpreter is a ‘L<sup>A</sup>T<sub>E</sub>X-Format’ or in the case of files belonging to the ‘L<sup>A</sup>T<sub>E</sub>X-format’ a program implementing the ‘T<sub>E</sub>X language’.

#### Conditions on Distribution and Modification

1. Activities other than distribution and/or modification of the Work are not covered by this license; they are outside its scope. In particular, the act of running the Work is not restricted and no requirements are made concerning any offers of support for the Work.
2. You may distribute a complete, unmodified copy of the Work as you received it. Distribution of only part of the Work is considered modification of the Work, and no right to distribute such a Derived Work may be assumed under the terms of this clause.
3. You may distribute a Compiled Work that has been generated from a complete, unmodified copy of the Work as distributed under Clause 2 above, as long as that Compiled Work is distributed in such a way that the recipients may install the Compiled Work on their system exactly as it would have been installed if they generated a Compiled Work directly from the Work.
4. If you are the Current Maintainer of the Work, you may, without restriction, modify the Work, thus creating a Derived Work. You may also distribute the Derived Work without restriction, including Compiled Works generated from the Derived Work. Derived Works distributed in this manner by the Current Maintainer are considered to be updated versions of the Work.
5. If you are not the Current Maintainer of the Work, you may modify your copy of the Work, thus creating a Derived Work based on the Work, and compile this Derived Work, thus creating a Compiled Work based on the Derived Work.
6. If you are not the Current Maintainer of the Work, you may distribute a Derived Work provided the following conditions are met for every component

of the Work unless that component clearly states in the copyright notice that it is exempt from that condition. Only the Current Maintainer is allowed to add such statements of exemption to a component of the Work.

- (a) If a component of this Derived Work can be a direct replacement for a component of the Work when that component is used with the Base Interpreter, then, wherever this component of the Work identifies itself to the user when used interactively with that Base Interpreter, the replacement component of this Derived Work clearly and unambiguously identifies itself as a modified version of this component to the user when used interactively with that Base Interpreter.
- (b) Every component of the Derived Work contains prominent notices detailing the nature of the changes to that component, or a prominent reference to another file that is distributed as part of the Derived Work and that contains a complete and accurate log of the changes.
- (c) No information in the Derived Work implies that any persons, including (but not limited to) the authors of the original version of the Work, provide any support, including (but not limited to) the reporting and handling of errors, to recipients of the Derived Work unless those persons have stated explicitly that they do provide such support for the Derived Work.
- (d) You distribute at least one of the following with the Derived Work:
  - i. A complete, unmodified copy of the Work; if your distribution of a modified component is made by offering access to copy the modified component from a designated place, then offering equivalent access to copy the Work from the same or some similar place meets this condition, even though third parties are not compelled to copy the Work along with the modified component;
  - ii. Information that is sufficient to obtain a complete, unmodified copy of the Work.
7. If you are not the Current Maintainer of the Work, you may distribute a Compiled Work generated from a Derived Work, as long as the Derived Work is distributed to all recipients of the Compiled Work, and as long as the conditions of Clause 6, above, are met with regard to the Derived Work.
8. The conditions above are not intended to prohibit, and hence do not apply to, the modification, by any method, of any component so that it becomes identical to an updated version of that component of the Work as it is distributed by the Current Maintainer under Clause 4, above.
9. Distribution of the Work or any Derived Work in an alternative format, where the Work or that Derived

Work (in whole or in part) is then produced by applying some process to that format, does not relax or nullify any sections of this license as they pertain to the results of applying that process.

10. (a) A Derived Work may be distributed under a different license provided that license itself honors the conditions listed in Clause 6 above, in regard to the Work, though it does not have to honor the rest of the conditions in this license.
  - (b) If a Derived Work is distributed under a different license, that Derived Work must provide sufficient documentation as part of itself to allow each recipient of that Derived Work to honor the restrictions in Clause 6 above, concerning changes from the Work.
11. This license places no restrictions on works that are unrelated to the Work, nor does this license place any restrictions on aggregating such works with the Work by any means.
12. Nothing in this license is intended to, or may be used to, prevent complete compliance by all parties with all applicable laws.

#### **No Warranty**

There is no warranty for the Work. Except when otherwise stated in writing, the Copyright Holder provides the Work ‘as is’, without warranty of any kind, either expressed or implied, including, but not limited to, the implied warranties of merchantability and fitness for a particular purpose. The entire risk as to the quality and performance of the Work is with you. Should the Work prove defective, you assume the cost of all necessary servicing, repair, or correction.

In no event unless required by applicable law or agreed to in writing will The Copyright Holder, or any author named in the components of the Work, or any other party who may distribute and/or modify the Work as permitted above, be liable to you for damages, including any general, special, incidental or consequential damages arising out of any use of the Work or out of inability to use the Work (including, but not limited to, loss of data, data being rendered inaccurate, or losses sustained by anyone as a result of any failure of the Work to operate with any other programs), even if the Copyright Holder or said author or said other party has been advised of the possibility of such damages.

#### **Maintenance of The Work**

The Work has the status ‘author-maintained’ if the Copyright Holder explicitly and prominently states near the primary copyright notice in the Work that the Work can only be maintained by the Copyright Holder or simply that it is ‘author-maintained’.

The Work has the status ‘maintained’ if there is a Current Maintainer who has indicated in the Work that they are willing to receive error reports for the Work (for example, by supplying a valid e-mail address). It is not

required for the Current Maintainer to acknowledge or act upon these error reports.

The Work changes from status ‘maintained’ to ‘unmaintained’ if there is no Current Maintainer, or the person stated to be Current Maintainer of the work cannot be reached through the indicated means of communication for a period of six months, and there are no other significant signs of active maintenance.

You can become the Current Maintainer of the Work by agreement with any existing Current Maintainer to take over this role. If the Work is unmaintained, you can become the Current Maintainer of the Work through the following steps:

1. Make a reasonable attempt to trace the Current Maintainer (and the Copyright Holder, if the two differ) through the means of an Internet or similar search.
2. If this search is successful, then enquire whether the Work is still maintained.
  - (a) If it is being maintained, then ask the Current Maintainer to update their communication data within one month.
  - (b) If the search is unsuccessful or no action to resume active maintenance is taken by the Current Maintainer, then announce within the pertinent community your intention to take over maintenance. (If the Work is a  $\LaTeX$  work, this could be done, for example, by posting to `comp.text.tex`.)
3.
  - (a) If the Current Maintainer is reachable and agrees to pass maintenance of the Work to you, then this takes effect immediately upon announcement.
  - (b) If the Current Maintainer is not reachable and the Copyright Holder agrees that maintenance of the Work be passed to you, then this takes effect immediately upon announcement.
4. If you make an ‘intention announcement’ as described in 2b above and after three months your intention is challenged neither by the Current Maintainer nor by the Copyright Holder nor by other people, then you may arrange for the Work to be changed so as to name you as the (new) Current Maintainer.
5. If the previously unreachable Current Maintainer becomes reachable once more within three months of a change completed under the terms of 3b or 4, then that Current Maintainer must become or remain the Current Maintainer upon request provided they then update their communication data within one month.

A change in the Current Maintainer does not, of itself, alter the fact that the Work is distributed under the LPPL license.

If you become the Current Maintainer of the Work, you should immediately provide, within the Work, a

prominent and unambiguous statement of your status as Current Maintainer. You should also announce your new status to the same pertinent community as in 2b above.

### Whether and How to Distribute Works under This License

This section contains important instructions, examples, and recommendations for authors who are considering distributing their works under this license. These authors are addressed as ‘you’ in this section.

### Choosing This License or Another License

If for any part of your work you want or need to use *distribution* conditions that differ significantly from those in this license, then do not refer to this license anywhere in your work but, instead, distribute your work under a different license. You may use the text of this license as a model for your own license, but your license should not refer to the LPPL or otherwise give the impression that your work is distributed under the LPPL.

The document ‘`modguide.tex`’ in the base  $\LaTeX$  distribution explains the motivation behind the conditions of this license. It explains, for example, why distributing  $\LaTeX$  under the GNU General Public License (GPL) was considered inappropriate. Even if your work is unrelated to  $\LaTeX$ , the discussion in ‘`modguide.tex`’ may still be relevant, and authors intending to distribute their works under any license are encouraged to read it.

### A Recommendation on Modification Without Distribution

It is wise never to modify a component of the Work, even for your own personal use, without also meeting the above conditions for distributing the modified component. While you might intend that such modifications will never be distributed, often this will happen by accident – you may forget that you have modified that component; or it may not occur to you when allowing others to access the modified version that you are thus distributing it and violating the conditions of this license in ways that could have legal implications and, worse, cause problems for the community. It is therefore usually in your best interest to keep your copy of the Work identical with the public one. Many works provide ways to control the behavior of that work without altering any of its licensed components.

### How to Use This License

To use this license, place in each of the components of your work both an explicit copyright notice including your name and the year the work was authored and/or last substantially modified. Include also a statement that the distribution and/or modification of that component is constrained by the conditions in this license.

Here is an example of such a notice and statement:

```

%% pig.dtx
%% Copyright 2005 M. Y. Name
%
% This work may be distributed and/or modified under the
% conditions of the LaTeX Project Public License, either version 1.3
% of this license or (at your option) any later version.
% The latest version of this license is in
% http://www.latex-project.org/lppl.txt
% and version 1.3 or later is part of all distributions of LaTeX
% version 2005/12/01 or later.
%
% This work has the LPPL maintenance status ‘maintained’.
%
% The Current Maintainer of this work is M. Y. Name.
%
% This work consists of the files pig.dtx and pig.ins
% and the derived file pig.sty.

```

Given such a notice and statement in a file, the conditions given in this license document would apply, with the ‘Work’ referring to the three files ‘pig.dtx’, ‘pig.ins’, and ‘pig.sty’ (the last being generated from ‘pig.dtx’ using ‘pig.ins’), the ‘Base Interpreter’ referring to any ‘ $\LaTeX$ -Format’, and both ‘Copyright Holder’ and ‘Current Maintainer’ referring to the person ‘M. Y. Name’.

If you do not want the Maintenance section of LPPL to apply to your Work, change ‘maintained’ above into ‘author-maintained’. However, we recommend that you use ‘maintained’ as the Maintenance section was added in order to ensure that your Work remains useful to the community even when you can no longer maintain and support it yourself.

### Derived Works That Are Not Replacements

Several clauses of the LPPL specify means to provide reliability and stability for the user community. They therefore concern themselves with the case that a Derived Work is intended to be used as a (compatible or incompatible) replacement of the original Work. If this is not the case (e.g., if a few lines of code are reused for a completely different task), then clauses 6b and 6d shall not apply.

### Important Recommendations

#### Defining What Constitutes the Work

The LPPL requires that distributions of the Work contain all the files of the Work. It is therefore important that you provide a way for the licensee to determine which files constitute the Work. This could, for example, be achieved by explicitly listing all the files of the Work near the copyright notice of each file or by using a line such as:

```
% This work consists of all files listed in manifest.txt.
```

in that place. In the absence of an unequivocal list it might be impossible for the licensee to determine what is considered by you to comprise the Work and, in such a case, the licensee would be entitled to make reasonable conjectures as to which files comprise the Work.