

Olde Worlde T_EX

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ABSTRACT

T_EX and L^AT_EX are used world wide. In recent years user groups have started to spring up spontaneously, outside (or alongside) the umbrella of TUG. A brief outline of the established European groups is presented here, together with a selective account of some historical background. There are some concerns, which although not specifically European, are certainly non-US, and indicate areas which tend to be overlooked when viewing the T_EX world from the New World.

1. Introduction

T_EX is alive and well on both sides of the Atlantic. Readers of *TUGboat* will be familiar with contributions from outside North America. But it is not the purpose of this short paper to chart the migration of T_EX from the New World to the Old Worlds. Besides anything else, I am bound to omit some of the early movement, simply because it is no longer evident. The early history of T_EX is only poorly known, which is a great pity, since it might provide some useful information about the way that software evolves and becomes incorporated into the wider world. Many institutions and systems take T_EX/L^AT_EX for granted — how did this happen? But fascinating as this might be (and worthy of ‘*Trivial Pursuit — the T_EX edition*’), it is not the topic here.

The objective is merely to report on the present status of T_EX user groups in Europe. As such, we are ignoring many aspects of T_EX and T_EX support.

One aspect of the T_EX community which must be obvious to all who read the electronic communications facilities like T_EXhax is the readiness of T_EX/L^AT_EX users to contact other T_EX/L^AT_EX users by *email*, and their apparent reluctance to join TUG. Search the *TUGboat* membership listings for the various T_EXhax contributors — where are they? This aside covers people with *email* access. The growth of “personal” versions of T_EX, where the person at the keyboard is less likely to have *email* or even bulletin board access, may point to an even larger community of effectively anonymous users.

2. European Organisations

Within Europe there are five groups with national or supra-national interests. The order in which they are presented here is completely arbitrary, and reflects neither size, age nor alphabet.

2.1 DANTE

The German T_EX users group (*Deutschsprachige Anwendervereinigung T_EX*) is, as its name says, a *German-speaking* user group, and as such, includes members from Austria and Switzerland, as well as the Federal Republic. DANTE was founded in 1989. But there have been significant T_EX/L^AT_EX activities in the German-speaking countries for several years. This year’s meeting in Eichstätt will

be the eighth annual meeting of German T_EX users, and closely follows T_EX89, the fourth European T_EX Conference, to be held in Karlsruhe (quite independently, in September). We might also note that Frank Mittelbach was awarded the Knuth Scholarship for his work with L^AT_EX, as well as Hubert Partl's work in customising L^AT_EX to the various regional requirements within the DANTE catchment. DANTE promises to be very active and to promote the use of T_EX in a very wide sense. One of their proposals is to provide T_EX/L^AT_EX courses in German (not before time!) and even to distribute a copy of Klaus Thull's public domain T_EX (for the IBM/clone-pc) to every school in the area — principally for use by teachers. There is also a proposal to produce a 'newspaper', which it is intended will appear at the Eichstätt meeting in October.

The contributions of the German-speaking T_EX users includes Norbert Schwartz' excellent introductory text to T_EX (1988), and Reinhard Wonneberger's extremely useful 'compact' L^AT_EX book (1988). Several other books are beginning to appear.

A common feature of most of the groups is the use of list servers. The list server which is operated from Heidelberg is a useful feature of DANTE's activity, enabling the electronic transmission of a large amount of public-domain T_EXware.

2.2 GUTenberg

Groupe (francophone) des Utilisateurs de T_EX is a little older than DANTE. Again, activity in France is nothing new. The second European T_EX conference was held in Strasbourg in 1986, and Jacques Désarménien of Strasbourg is well known for his work in incorporating French hyphenation and national characters into T_EX, since before 1984. GUTenberg was constituted on September 23rd 1988, but before that time an unofficial group did exist, and organised a number of meetings, including one entitled "T_EX et les Sciences Humaines" (Paris, 1987). In fact GUTenberg traces its origins back to 1984, following a suggestion from Jacques André. The focus of GUTenberg appears to be Paris rather than Strasbourg. Both GUTenberg meetings (in 1988 and 1989) have been in Paris, but next year's meeting will be in Toulouse. Both Paris meetings were well attended and included many participants from the academic, research and commercial world. One of the encouraging features of GUTenberg membership is the support from the commercial sector (indicating that pragmatic concerns can be accommodated from within T_EX/L^AT_EX).

Although this apparently emphasises an exclusively French component to GUTenberg, it does include the other parts of the French-speaking world, like Switzerland, Belgium and Quebec. Michael Ferguson's ML-T_EX (Multilingual T_EX), which greatly eases the use of national characters and hyphenation, is a Canadian development which was wide applicability both outside and within the French-speaking world. GUTenberg is empowered to distribute VMS, UNIX and MVS implementations of ML-T_EX to its membership (for free, but with copying restrictions). They also distribute a version of SBT_EX (one of the public domain MS DOS compatible T_EXs), together with various T_EXtools.

Education plays an important role: this year's annual meeting (May 16th–17th; for a report, see *TUGboat* 10:150–153) included two day-long presentations on METAFONT and L^AT_EX (naturally, in French).

One of GUTenberg's major contributions is the *Cahiers GUTenberg*. So far three editions of the *Cahiers* have appeared. Adopting a fairly common French convention, the very first edition was 'numéro zéro'. Production is of a high quality, and so too is the content. The *Cahiers* deserve far higher circulation outside the French-speaking world. Although not a GUTenberg "production", we must also note Raymond Séroul's *Le petit livre du T_EX* (1989), an excellent introduction to T_EX.

There is a list server which is used by the French group. Refreshingly, they are well-aware of the problems of the user who is not connected to electronic networks and are hoping to develop access to the list server through Minitel.

2.3 Nordic T_EX Group

While the previous two groups are, in a sense, language specific, the Nordic group is a geographical supra-national group, including participants from Denmark, Norway, Sweden and Finland. The language problems are sufficiently diverse, even *within* some of the individual countries that no one set of language solutions (hyphenation/national character) is possible. A result of the heterogeneity of language is that the meetings tend to be conducted in English, as the *lingua franca* of the area. The

reluctance of the French and German groups to use English (because it is not spoken by the majority of the membership) is not found here. This does carry with it the possible implication that Nordic T_EX users may be drawn from the sector which has gone through an educational process which includes English as a foreign language. This may represent an ultimate restriction on the distribution of T_EX to the academic and research areas, and a slowing down of its penetration to more general technical and non-technical document preparation. (Equally, it seems that almost everyone speaks English, to the extent that Swedes may reply in English to a question posed in Swedish by a Dane — perhaps the scope for confusion is lessened!)

The Nordic group has had a number of meetings, and seems to be able to maintain a pattern of about one meeting per year — this year's was on June 12th (a report appeared in *T_EXline* 9:25–27). The structure is quite informal, although there is an organising committee elected each year. Being drawn from a number of constituent countries, this has to be a well-balanced affair, with representatives from each country. Unlike the other European groups, membership in this group is free.

T_EX has been used in the Nordic countries for some considerable time. The first version of T_EX which I ever used (T_EX78 on a CDC NOS machine, driving an APS μ -5 phototypesetter) was obtained from the University of Århus in the early 1980s.

There is a short L^AT_EX book by Steen Larsen, *L^AT_EX på Dansk* (1989), produced at UNI-C, in Danish, and a wealth of other introductory documentation in Norwegian, Finnish, and English. It is unfortunate that this material is not more widely known. Although few outside Finland may read Finnish, we can all appreciate the examples and the structure of such documents. This is probably a general point: there is undoubtedly support material available in France and Germany which does not surface outside those countries. It is inconceivable that they have no relevance to the rest of us. Sadly, the canonical T_EX and L^AT_EX books are not really suitable for many beginning T_EX/L^AT_EX users, excellent though they may be for the T_EXpert and T_EXnician.

Although there is no list server as such, the Nordic group is setting up an electronic mailing service over the Scandinavian Universities Network which will channel T_EX news. They also plan to handle electronic enquiries over the net.

Many of the suggestions presented by the Nordic representatives for modifications to T_EX (in order to handle foreign languages more easily) were suggested in a paper by Romberger and Sundblad in 1985 at the first European T_EX Conference. That paper also makes quite explicit the problems generated by keyboards which replace some crucial T_EX characters by national letters. Losing the \, {, }, [and] presents some interesting problems, and certainly delayed the adoption of L^AT_EX.

2.4 Dutch T_EX Group

The NTG (*Nederlandse T_EX Gebruikergroep*), is about one year old. Their recent two-day meeting in Utrecht (June 29th–30th; for a report, see *T_EXline* 9:29–30) combined introductory courses on L^AT_EX with a conventional conference. As a somewhat smaller grouping (Dutch is spoken by fewer people than either German or French), the Dutch are very aware of the need for international cooperation. Many of their concerns parallel those of other countries: the customisation of L^AT_EX style files is a wheel which has been re-invented several times already, but the identification of the parts of l_pl_ain and the .sty files which require harmonisation have not been adequately documented at an international level, despite the applicability of a general solution to this particular problem. Both T_EX and L^AT_EX are sometimes seen as unnecessarily “Anglo-Saxon” (whatever that means!), with embedded assumptions which are not truly warranted.

There are other L^AT_EX concerns: the adjustment, or creation, of genuine “European” styles is well overdue. We are all aware of the need to use international sized paper (usually A4), and the implicit assumptions that T_EX and L^AT_EX make of US paper sizes: equally, European typography is different from the rather narrow Addison-Wesley style typography exemplified by L^AT_EX. This is no criticism of L^AT_EX. It is a criticism of all those of us who have sat idly by and who have not nailed our friendly local typographers and document designers to the wall to help us develop new, appropriate styles.

Like most other groups, NTG operate a list server. While this is really of use only to those on electronic networks, the NTG augments this by providing some style files and macros on pc disk.

2.5 The UK T_EX Group

This group, which has not yet adopted a catchy title like DANTE or GUTenberg, has been formed in the last year or so. It is still being run by a non-elected organising committee, although this should have been rectified by October 1989, when the annual meeting will be held in Exeter. Despite its rather low-key approach, it has organised three meetings since December 1988: all were one-day affairs, but used different venues each time — an attempt to diminish the domination of London as a location (for reports see *T_EXline* 8:17–18; 8:18–20; 9:20–22). It is perhaps a hallmark of the strength of the group that there have been dominant themes for the meetings (except the initial prototype). The intention is to have four one-day meetings each year, at a variety of locations. Historically though, the very first UK “T_EX” meeting was probably the METAFONT meeting organized in Oxford on March 20th, 1987, by Charles Curran (for a report, see *T_EXline* 5:8–9).

It is difficult to separate the UK group entirely from the activity of the Aston T_EX archive.¹ Thanks to the far-sightedness of Aston University and the efforts of Peter Abbott, an entire VAX 11/780, together with a considerable amount of disk space, is dedicated to electronic T_EXware. This archive is probably the largest single collection of electronic T_EX-related material in the world, and represents a unique resource. The archive is accessible over various electronic networks, and although it does not share the delight of using the otherwise ubiquitous IBM list servers, has comparable power and ease of use. A recent major re-organisation has made navigation through the archive somewhat easier. However a recurrent problem is the character corruption which occurs at one of the major gateways into and out of the JANET network. This has the effect of losing braces entirely and corrupting at least two other characters, in a two-to-one mapping. This minor problem greatly compromises any chance of using the archive in a global area network. It is hoped that this problem will soon be removed.

The user group is also considering how to make the archive accessible to those without JANET access, either through guest accounts, or other types of electronic (or even non-electronic) communication. Aston has also been the focus of UKT_EX, a regular listing similar to T_EXhax. Although begun as a UK-specific listing, it now has a world-wide membership. An interesting feature of UKT_EX is its regular Friday evening appearance (or, at least, transmission). Other listings might take note.

As a spin-off from part of the archive activities, an introductory book is being prepared. This is not a T_EX book, but a background book which aims to be of use to implementors of T_EX. It seeks to explain the inter-relationships between the various T_EX tools. Although this information already exists, it is available in a wide variety of (often) inaccessible sources — like early editions of *TUGboat*, or Stanford reports.

The UK was also the site of T_EX88 (or T_EXeter), the 1988 European T_EX conference. Joachim Lammarsch, of DANTE, says that it was here that “the idea of a German T_EX society came into my mind”. He then went on to try to bring together German users into a formal group. It was also at Exeter that the first moves were made towards a UK grouping. T_EX88 was a very good, friendly meeting, attended by about the same number of people as the TUG meeting which followed in Montreal (August 1988).

It is curious that no books have yet appeared from the UK on T_EX or L^AT_EX, although rumours abound. Addison-Wesley, the nominal publisher of T_EX material is known to have turned down proposals for such books from the UK, and it seems that it will be left to other publishers such as Oxford University Press, John Wiley and Sons, or even Ellis Horwood Publishers, to publish these. On the other hand, the newsletter *T_EXline* has been produced and distributed since late 1984. Now in its ninth edition, it has gradually grown from about eight pages to a peak of forty pages (edition eight). Like the *Cahiers*, it covers a wider range of topics than *TUGboat*.

3. What of the Rest of Europe?

Curiously, although Italy was the site of the first T_EX conference in Europe (1985), there appears to be no real focus for T_EX users there. Equally, the lack of a user group in Eire is not inhibiting the hosting of the first TUG meeting in Europe, to be held in Cork in September 1990. Although there is at least one journal being produced with T_EX in Spain, whatever individuals exist do not seem to

¹ See next article, by Peter Abbott —Ed.

have been drawn together yet.² In Israel (defining Europe rather widely), there are a number of active T_EX workers, but again, no clear focus.

Clearly something is required. We will assume that user groups are useful phenomena. One of the useful suggestions made has been that a list server could be set up, specific for any national group. The list server could be almost anywhere, provided there is adequate electronic link up. Again this divides the world into haves and have nots, but provided we remain aware of the problem, it can probably be handled.

There is also the problem of Eastern Europe. The problem is mainly one of currency restrictions, rather than availability of computing hardware. The IBM pc (or clone) appears to have penetrated widely, although laser printers (and consumables) appear less readily available. It is difficult for T_EX users in eastern Europe to join TUG (or to buy T_EXware). Nevertheless, there is a significant T_EX presence in Poland, in Yugoslavia, and probably in the German Democratic Republic and the Soviet Union. The 1985 European T_EX Conference Proceedings contain a paper about the problems involved in transferring T_EX to an indigenous East European computer (Bień and Kołodziejska 1985), and since then some very sound work has been done in creating a Polish T_EX, which, among other concerns, handles the national characters which are not easily obtained through standard T_EX — like the ogonek and the circle accent.

4. What are the Concerns of T_EX Users in Europe?

Of course the concerns are as diverse as the concerns of T_EX users elsewhere (perhaps more so than users in North America). But some key themes do keep cropping up.

4.1 National Characters

The various national characters, including the accented characters, pose certain problems. The first of these is that T_EX does not hyphenate beyond the point at which the first control sequence in a word occurs.³ Another minor problem is the absence of the ogonek accents and the non-explicit presence of the circle accent. European languages use different conventions to indicate “quotes”, for example, French uses «guillemets», and German tends to use quotes like „this“.

4.2 Hyphenation

The hyphenation algorithm used by T_EX may be used by other languages, but the patterns have to be created for each language. Although this has been done for a good many languages, this does require an added degree of knowledge and research on the part of the ordinary user.

4.3 L^AT_EX

The T_EX tool of choice in Europe is L^AT_EX. It is interesting to speculate why — perhaps the slightly later diffusion of T_EX and L^AT_EX to Europe meant that by the time it arrived, L^AT_EX was a stable product. I suspect that L^AT_EX is actually used in North America much more than we commonly acknowledge. Perhaps one of the reasons that TUG courses have only taken off very slightly in Europe is TUG’s tendency to offer courses on T_EX rather than L^AT_EX. TUG’s perception of T_EX has tended to be of T_EX rather than L^AT_EX, or even METAFONT.

4.4 L^AT_EX Customisation — The Language

As noted earlier, to use L^AT_EX outside the restriction of English requires some work. This has been completed for German, Dutch and French (at least). This information should be properly documented to make it easier for other language groups to emulate. There is no such thing as a T_EX or L^AT_EX problem which is “only of interest to our own language group”.

4.5 L^AT_EX Customisation — The Typography

L^AT_EX styles are being generated to accommodate European styles, for publishers based in Europe,

² At the TUG conference I learned that a Spanish group was in the process of being organised.

³ In a major announcement at the Stanford meeting, Knuth outlined a proposed revision of T_EX, to v. 3.0, which would include looking at the hyphenation problems —Ed.

but also for everyday needs. Many of us feel that the “received” L^AT_EX styles are rather “loose”, with excessive white space for European expectations. It is clearly necessary to document any new styles so that others can use them (please).

4.6 Education

It is not enough to assume that T_EX courses in English are sufficient. As T_EX, and especially L^AT_EX spread out, we acquire users who do not necessarily understand, far less speak, English, as it is not the *lingua franca* that T_EX and L^AT_EX are.

4.7 Networking/List Servers

This is an area which will burgeon and penetrate everywhere, no matter what controls and directions we attempt to give it. It is difficult area to coordinate. Keeping track of what software is available where, or even which version is current, represents a real problem.

4.8 Standards

This is by no means unique to Europe, but there is plenty of evidence of awareness of international standards in the document processing area, such as SGML (the Standard Generalized Markup Language), ODA (Office Document Architecture), and so on. There also seems to be a marked willingness to adopt and adapt to these standards — and to cooperate with their user groups or allied organisations. Papers in which such standards have played an important role are to be found in the *Cahiers*, in all the European T_EX conferences, and also in T_EXline.

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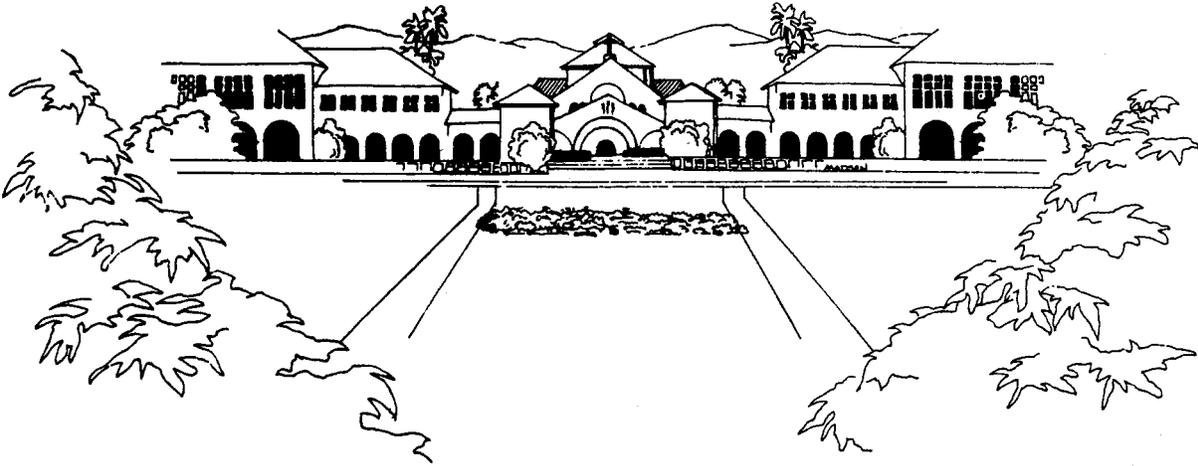
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TEX Users Group
Stanford University, August 11-14, 1985
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