
Comments on the paper “Typesetting Catalan texts with T_EX”

The interesting paper by G. Valiente Feruglio and R. Fuster on typesetting Catalan (*TUGboat* 14, no. 3, pp. 252–259) brings forth some spicy information about a language that is not widely known but is a legitimate member of the Latin family.

This paper sets forth another problem that is going to be more and more important as multilanguage facilities become available for more and more T_EX users: we all are attracted to make statements concerning languages for which we do not have sufficient supporting evidence or a specific competence (... starting with myself, since I am not immune from this “weakness”).

Valiente Feruglio and Fuster make two statements concerning italian that are wrong:

a) Note 4 on page 255: “... It differs from Spanish and Italian: in these two languages all combinations of ‘i’ or ‘u’ with another vowel are diphthongs.”

b) First paragraph on page 257: “... For instance, Latin INTELLIGENTIA derives into French *intelligence* and Italian *intelligenza*, while Latin SELLA derives into French *selle* and Italian *sella*. Then these two languages use the same orthography for two different phonemes.”

Statement a) can be easily corrected for what concerns italian by saying that “all combinations of *unstressed* ‘i’ or ‘u’ with another vowel are diphthongs.” T_EX does not know anything about stressing, especially in italian where stress accents are not compulsory, so that the imprecision of statement a) has no consequences for T_EX.

Statement b) is definitely wrong for what concerns italian, and I’d say also for what concerns french, but I leave the french issue to French speakers, since, although I speak fluent french, I am not a French speaker.

Italian orthography is a phonetic one and almost perfectly matches the phonemes of the language; although stress (tonic) accents are not compulsory and phonic accents are optional and very seldom used, although the two variants (voiced and unvoiced) of the letters ‘s’ and ‘z’ are not distinguished with different glyphs or graphemes, I’d say that italian spelling is perfectly adherent to the semantic value of the various phonemes. In other words the two variants of ‘s’ and ‘z’ don’t change the meaning of a word, just reveal the regional origin of the speaker. In any case these points have nothing to do with the “long l” phoneme (|ll|) and the “lateral palatal l” phoneme (|λ|): in italian the former is spelled ‘ll’ and corresponds to the catalan ‘ll’, while the latter is spelled ‘gli’ and corresponds

to the catalan ‘ll’. In conclusion the double ‘l’ in *intelligenza* and *sella* are pronounced exactly the same in italian, and it is not true that the same orthography is used for two different phonemes.

Ironically the typical italian trigraph ‘gli’ is present in Valiente Feruglio’s second family name; I would not be surprised if he discovered some Italian ancestors in his maternal genealogy. I found half a dozen Feruglio entries in the telephone directory of my city!

Of course these remarks do not invalidate the excellent paper by Valiente Feruglio and Fuster, and I warmly thank them for disseminating information on the catalan language that, apparently, received the attention it deserves only in this century.

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Comments on the comments: Typesetting Catalan texts with T_EX

*O Dio, la Chiesa Romana
in mani dei catalani!*
Pietro Bembo (secolo XV-XVI)

We appreciate the remarks by C. Beccari on our paper “Typesetting Catalan Texts with T_EX” (*TUGboat* 14, no. 3, pp. 252–259), and take the opportunity to make the statements therein more precise.

We agree with Beccari’s first statement in that all combinations of unstressed ‘i’ or ‘u’ with another vowel are diphthongs in Spanish and Italian. As a matter of fact, unstressed ‘i’ and ‘u’, in contact with a vowel, are semivowels (or semiconsonants) but they become full vowels when stressed, and therefore there is no diphthong when a stressed ‘i’ or ‘u’ is combined with a vowel.

The second statement made by Beccari, however, needs more clarification. Our statement that Italian uses the same orthography (ll) for two different phonemes (|ll| and |λλ|) is not well posed. It does not refer to the current italian spelling and pronunciation alone but in the context of its relationship to the evolution from Latin to modern languages.

Romantic languages differ in the way they spell and pronounce words derived from Latin, depending on whether the words derive from Classical Latin or from vulgar Latin. The solutions adopted by the

different romanic languages are not much different, although they are not identical.

A usual phenomenon in this sense, at least in the case of Catalan and Spanish, is the *palatalization* into $|\lambda\lambda|$ of words derived from vulgar Latin. This palatalization is represented by ‘ll’ in Catalan and Spanish and by ‘gli’ in Italian. This phenomenon, however, does not occur in words of Classical Latin origin, although in some languages (Catalan and Italian, among others) there is a duplication or *gemination* which is what is represented by ‘ll’ in Catalan, while it is represented by ‘ll’ in Italian. These words are also written with ‘ll’ in French, although there seems to be no difference in pronunciation, while in Spanish it is written ‘l’ and pronounced $|l|$.

For instance, the word INTELLIGENTIA, which is of Classical Latin origin, derives into Catalan *intelligència*, pronounced $|\ll|$, into Italian *intelligenza*, pronounced $|\ll|$, into French *intelligence*, pronounced $|l|$, and into Spanish *inteligencia*, pronounced $|l|$.

We hope to have clarified our statements with this discussion. Although Valiente Feruglio’s second family name contains the trigraph ‘gli,’ which corresponds to the $|\lambda\lambda|$ phoneme, there is no record of Roman ancestors with that family name known to the authors, while Valiente Feruglio’s last Italian ancestor was born in Ramanzacco, in the province of Udine, in 1861, and died in Santa Fe (Argentina) in 1937. As it turns out, however, having Italian ancestors does not guarantee a good knowledge of the Italian language, for Valiente Feruglio does not speak fluent Italian...yet.

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Book Reviews

Book review: *Math into T_EX*

Nico Poppelier

George Grätzer, *Math into T_EX*, *A simple introduction to $\mathcal{A}\mathcal{M}\mathcal{S}$ -L^AT_EX*. Birkhäuser 1993, 294 pages (including indexes) ISBN 0-8176-3637-4 (includes diskette).

Even though document-preparation packages of the WYSIWYG type become better and better every year, the majority of mathematicians, computer scientists and physicists still use T_EX, in any of its many flavours. In 1982 the American Mathematical Society released $\mathcal{A}\mathcal{M}\mathcal{S}$ -T_EX, which has certainly contributed to the popularity of T_EX in mathematician’s circles. Around 1990, the macros of $\mathcal{A}\mathcal{M}\mathcal{S}$ -T_EX were made available for the expanding community of L^AT_EX users in the form of $\mathcal{A}\mathcal{M}\mathcal{S}$ -L^AT_EX. And now, finally, there is a book that describes this useful but complex extension to L^AT_EX for beginners.

George Grätzer teaches mathematics at the University of Manitoba (Canada), and has tried to write a book “from a user’s point of view”. His book consists of three parts. In part I, *A short course*, he explains how to install $\mathcal{A}\mathcal{M}\mathcal{S}$ -L^AT_EX on an IBM-compatible PC under DOS, and on an Apple Macintosh, and then explains the basics of $\mathcal{A}\mathcal{M}\mathcal{S}$ -L^AT_EX. In part II, *A leisurely course*, he goes back to the fundamentals of typing text and formulas in T_EX, and then explains all a mathematician, or engineer or scientist, needs to know about $\mathcal{A}\mathcal{M}\mathcal{S}$ -L^AT_EX. Finally, part III is about customizing.

Math into T_EX was written with the basic idea behind the design of L^AT_EX nestled firmly in the mind of the author. Mr. Grätzer emphasizes proper usage of L^AT_EX while writing papers and books. His approach is didactically very good, he takes his time explaining things, and gives enough examples. *Math into T_EX* is not a book about L^AT_EX itself, so the author does not cover all of L^AT_EX. Nevertheless, he treats tables (briefly) and B_IB_TE_X, which makes the book a useful introductory text as well as a handy reference for authors who do not want to know more about T_EX and its flavours than is necessary for writing a research paper.

Even though many people, including several well versed in T_EX and L^AT_EX, read draft versions of *Math into T_EX*, the book contains a lot of errors. One of the more interesting ones is this one: in section 3-4.8, on hyphenation, the author gives the following example