Those obscure accents…

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Abstract

»A special shape of a háček, similar to an apostrophe, is used in Czech and Slovak with ď, ľ, Ľ and ť characters. It could be derived from the apostrophe or comma, but it should be more humble, smaller, and, importantly, narrower. Generally, the symbol should draw less attention than the comma. This special form could also take a straight shape similar to acute; this usually occupies less space than an apostrophe-like form and it does not cause as many problems in kerning. Vertically, the symbol is most often placed towards the ascender line, but its position does not necessarily have to be constant (with ť, it is often necessary to place the accent higher that with the other characters). With capital Ľ, it is desirable that the accent exceeds the height of the character. This is mostly equivalent with justifying the upper edge of the accent to the ascender line.«

[DIACRITICS, a project by `typo.cz` and `designiq.cz`]

An excursion into history with many examples of good, bad and ugly solutions.

Briefly from the history

The motto quoted in the abstract, which states in the condensed form the final lesson I learned during the long (never finished) way to understand typographic quality, would be sufficient. Nevertheless I try to give a brief summary of this rather old historical problem which (as far as I know) was never touched in our Grand Wizard's creativity (at least not in the five books of the *Computer & Typesetting* series, I suspect).

It is believed that usage of accents in Czech orthography comes from Jan Hus (sometimes quoted as John Huss in English literature) or from his circle (the famous tractate *De orthographia Bohemica* which is also usually designated to Jan Hus originated around 1406). It solves the problem of how to write consonants which do not exist in the Latin alphabet: not as a pair of letters (digraph) but with only one letter, as close as possible to the original one, with some diacritic sign (caron or háček for soft consonants and acute for long consonants).

The accent for softening appears often as a dot, then a hook, not exactly in the same shape as today — in many cases it is closer to the shape of the hook of letters ť or ď:

Note that the original form of dot still exists in Polish ż and also that the original digraphs sz and cz are still in use there.

It should be noticed that black letters (fraktur) were widely used in those times for typesetting. And for many years, types were often not created in the country but brought from abroad. Black letters were used in printing until the end of 18th century. Roman letters were used rarely, mostly in titles only. With the exception of Comenius' book published 1659 in Amsterdam the first Czech book printed in roman letters appears only in 1738.

One exception is shown in Comenius' manuscript of *Didactica* (Leśno 1627–32):
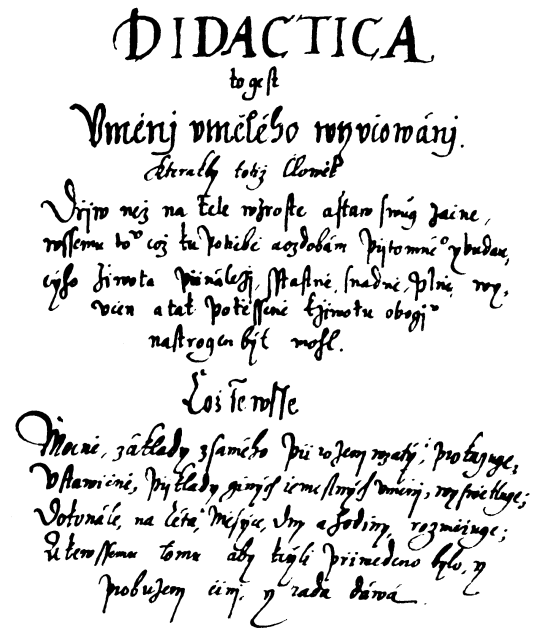
The change from blackletters to old good roman types came in Bohemia only with a national revival. Roman types served as a symbol of liberation from the German influence. But the problem with appropriate accents survives, as one of the first primers (spelling-books) clearly shows.

ď ³⁴· ď

ha-de! há-dě, ha-dy,
ha-di, há-ďa-ta, vi-di,
ho-dy, ho-dí, cho-di,
ku-ře do-bá, dí-ra,
dě-ra-vý, ho-di-ny.

ń ³⁵· ň

hu-ňa-tá ha-le-na,
ba-ňa-tá ná-do-ba,
ko-ře-ní, ku-chy-ně,
hú-ně, bá-ně, ku-ře
bo-jí se lu-ňá-ka.

The name caron seems to be more popular in typography, while háček is widely used in linguistics. In Czech, háček means the diminutive form of 'little hook'. On the other hand, the etymology of the word caron is quite unclear (there is an idea that it may derive from a fusion of the words caret and macron). In various languages which use this accent, caron is called 'softener' or 'palatalization mark', 'little roof' or even 'hat' (in Finnish).

Today the caron is also used by the Slovaks, Slovenians, Croats, Bosnians; Serbs and Macedonians (when romanizing the official Cyrillic); Upper Lusatian and Lower Lusatian Sorbs, Lithuanians, Latvians, and Belarusians (formerly in the Latin alphabet, now only in romanization of the official Cyrillic).

Writing and printing carons

In printed text, the caron combined with letters t, d, l, and L is reduced to a small stroke. This usually does not happen in handwritten text. Although the stroke can look similar to an apostrophe, there should be a significant difference in kerning.

Using apostrophe in place of a caron looks quite ugly though it can be still found in many contemporary examples, such as:

šťáva kraťákovi

On the other hand, in some cases apostrophe is used as sign of 'palatization' in transliteration of some languages, e.g. Russian.

Virtual fonts. Thanks to our Grand Wizard, virtual fonts provide an easy method to prepare a font with the necessary accents, with of course the palatal hook serving as an exception confirming the rule... Unfortunately most "localized" versions of commercial fonts distributed not very long ago were prepared in much the same way: i.e. ľ as l with apostrophe being 'close enough'. One can see the difference with the text set in metal type

„Přešlo to všecko a teď tu stojíš jako smeták zapomenutý v koutě, když jím po plesu zametli. Anér agathos einai ... to je přece z Xenofontovy Anabase. Jak stárneme, jak zapomínáme!"

and one of the first electronic versions of Baskerville

1234567890'!?(.,- —)'«»%§;
áéíĺóŕúůýčďěľňřšťž
ÁÉÍĹÓŔÚŮÝČĎĚĽŇŘŠŤŽ
äöüÄÖÜàøØæÆåÅßôÔ

The quality of system fonts in Windows is not much better:

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

(all lines were printed to a PostScript file from the Windows font viewer). Not understanding the text one could guess that there are more than five words in the line! Perhaps all the effort of the best Czech typographers including Vojtěch Preissig, Karel Dyrynk and Oldřich Menhart was not forgotten?

ČÉŮ ěáůěáů ČÉŮ
ČÉŮěáůěáů ČÉŮ

AÁBCČDĎEÉĚFGHIÍJKLMNŇ
OÓPQRŘSŠTŤUÚVWXYÝZŽ
aábcčddďeéěfghiíjklmnňoópqrř
sštťuúůvwxyýzž 1234567890

Karel Horák

The above first example of a Goudy font with Preissig accents may look little bit extravagant, mainly the rather original ring of uppercase U which was eventually not generally accepted, but in a more moderate form can be also found in Menhart's Manuscript. His solution for accents is usually taken as one of the best in Czech typography:

ABCDEFGHIJK
LMNOPQRSTUVWXYZ&
⤜1234567890⤟
abcdefghijklmnopqrst
uvwxyz
áäàčďířšťúžﬀﬁﬂß
{.:†§„—"!?*;,}

Antikva Manuscript z písmolijny Grafotechna,
národní podnik v Praze

Finally, everyone can be extremely pleased with the results of František Štorm whose Storm Type Foundry brought during the last decade many beautiful fonts for moderate price (with the rise of OpenType perhaps one can fortunately forget about his quite unusable afm files). I find his accents the best!

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

žluťoučký kůň úpěl ďábelské ódy!

His variant of Times in the last line is quite original and together with another rather good variant of Times from Macron, which sells Adobe fonts:

žluťoučký kůň úpěl ďábelské ódy!

could serve as a good inspiration for the TeX Gyre project whose Termes from the narrow point of view of 'palatal hook' (the next fourth line) seems to be less acceptable...

žluťoučký kůň úpěl ďábelské ódy!
žluťoučký kůň úpěl ďábelské ódy!
žluťoučký kůň úpěl ďábelské ódy!
žluťoučký kůň úpěl ďábelské ódy!

On the other hand Pagella is much more acceptable than the following two versions of Palatino—

the first is from the Windows fonts directory, and the other from the older Czech localization of Adobe Palatino:

žluťoučký kůň úpěl ďábelské ódy!
žluťoučký kůň úpěl ďábelské ódy!

Many other well-localised fonts of Adobe can be seen at [6].

Inspired by the ambitious and promising TeX Gyre Project I humbly started some basic attempts with the Utopia family, which also belongs to the group of freely available fonts of Ghostscript and TeX installations. I have liked to use Utopia for typesetting for a very long time (having previously implemented accented letters via virtual fonts generated with J. Zlatuška's program accents). I decided to try the following strategy:

- use Petr Olšák's program `a2ac` which adds composite characters into an afm file (of course with quoteright instead of appropriate accent);
- use `t1tidy`, a small and rather old program (its version from [7] works only under the old DOS) which is able to transform composites in a Type 1 program into real characters;
- edit the shape and placement of 'caron' with help of Fontographer by hand;
- convert the result with MT1 package.

References

1. Mirjam Bohatcová & kol.: Česká kniha v proměnách staletí (Czech book on changes over the centuries, in Czech), Panorama, Praha, 1990.
2. Oldřich Hlavsa: Book of type and design (Typografická písma latinková, in Czech), SNTL, Praha, 1960.
3. Bogusław Jackowski: Latin Modern fonts at the eleventh hour, talk at CSTUG meeting, Brno, 26 November, 2005.
4. Písmo ve výtvarné výchově (Types in Lessons of Aesthetics, in Czech), textbook for pedagogic faculties, SPN, Praha, 1989.
5. Karel Stejskal, Petr Voit: Illuminated manuscripts of the Hussite age (in Czech, English summary), National Library of Prague, Grafit, Praha, 1990.
6. `www.caron.cz/pisma/pisma.html`
7. `fonts/utilities/t1tools/t1tidy` on CTAN