## Antykwa Toruńska: an electronic replica of a Polish traditional type

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In employing computers for typesetting Polish texts, a big problem has emerged—the fonts which come with publishing programs (usually of foreign origin) don't contain Polish diacritical characters. Up until now the problem of local adaptation of these programs was limited to merely adding Polish diacritical characters to the existing fonts. We should remember, however, that Poles have printed their books for centuries and have a long typographic experience.

In the precomputer era, at least half of the Polish books and periodicals were produced with the genuine Polish typeface Antykwa Półtawskiego. It was designed by the Polish graphic artist and typographer Adam Półtawski (1881–1952), and from 1931 was cast in the well known Polish type foundry of Jan Idzikowski, and following World War II, in Warsaw type foundry.

The second Polish font designed for production was Antykwa Toruńska. In order to preserve the Polish cultural heritige, I decided to convert both type-faces from the metal cast to computer programs. This is a very difficult task, as I am not a professional typographer or a graphic artist, but if professionals prefer to polonize foreign faces forgetting about the Polish ones,...

Antykwa Toruńska is a serif font designed by the Polish typographer Zygfryd Gardzielewski from Toruń. A few collaborators helped him with the production of metal types. Antykwa Toruńska was used mainly for commercial printing. Its distinguishing features are expanded upper stem ends and wavy shapes of certain bars, diagonal strokes and serifs. It was first cast in the "GRAFMASZ" type foundry in Warsaw and offered in three styles—roman, demibold and italic—in sizes ranging from 6 to 48 didot points.

The adaptation of Antykwa Toruńska for digital typography started at the beginning of 1995. The

first version—a very imperfect one—was based on shapes copied from the font catalogue.

The second version, still not entirely satisfactory, was prepared from Xerox copies of character shapes kindly donated by Mr. Zygfryd Gardzielewski, to whom I am extremely grateful.

Andrzej Tomaszewski has pointed out many deficiencies in this version, all of which derive from the fact that the design of the typeface is too close to that of the originals; these were prepared by hand 30 years ago, and thus do not conform to current standards of computer typography.

The most recent version may legitimately be called a "computer version", since it guarantees the precision and the exact repetition of key elements of the characters. The characters' outlines were drawn in CorelDraw from scanned bitmaps, and the resulting .eps files were exported to Fontographer.

Most of the time was spent positioning character shapes inside bounding boxes and defining kerning pairs rather than drawing character outlines. The evaluation of positioning and kernings is subjective so the opinions of others with regard to the effect achieved may be different.

Hinting remains a serious problem, especially taking into account the tools I am using. Antykwa Toruńska does not contain horizontal and vertical lines; almost all lines are diagonal or fancy wavy. It makes good hinting almost impossible. One should not use this font at a resolution lower than 600 dpi, particularly at small character size. At high resolution, hints became unimportant.

The font contains 232 glyphs set up according to QX encoding. The character set enables TeX users to work comfortably with almost all european languages. Antykwa Toruńska contains the following characters:

μ ... fk ff fi ff ffi ffi f1 j ` ´ ˇ ⁻ ˚ ¸ β æ æ ø Æ Œ Ø ! ″ # \$ % & ´() \* + , - . / 0 1 2 3 4 5 6 7 8 9 :; j = ζ? @ A B C D E F G H I J K L M N O P Q R S T

 $<sup>^{1}</sup>$  First printing house was established in Cracow around 1490.

 $\begin{array}{l} U\,V\,W\,X\,Y\,Z\,\big[\,\,\check{}^{\,\,}\big]\,\,\hat{}^{\,\,}\,\,\check{}^{\,\,}\,\dot{}$ 

As with the original (metal) version of Antykwa Toruńska, the font contains *three* shapes: regular, italic and bold.



**Figure 2**: Antykwa Toruńska Italic (anttri) at 6, 8, 10, 12, 16, 24, 36, 48, 96pt



**Figure 1**: Antykwa Toruńska Regular (anttr) at 6, 8, 10, 12, 16, 24, 36, 48, 96pt



**Figure 3**: Antykwa Toruńska Bold (anttb) at 6, 8, 10, 12, 16, 24, 36, 48, 96pt