

Cyrillic Gothic: Formal Modifications in the Design of a Russian Sans-serif Typeface

André Gürtler and Christian Mengelt

Four series for text and display composition were designed for a new Cyrillic sans-serif typeface. Historic and existing Cyrillic typefaces are assessed. Illustrations show the modification of individual characters toward an over-all consistent design of the entire alphabet.

We were commissioned three years ago by Compugraphic Corporation, USA, to design a Russian sans-serif typeface. The assignment involved four series for text and display composition. The typeface was presented in Moscow as a part of Compugraphic's participation at a graphics industry trade fair.

In addition to fixed technical limitations, the request of our client was to propose a typeface whose appearance conformed with conventional Russian typefaces. We initially assessed the existent Russian faces of European type manufacturers. As a point of departure for the design, we were also interested in the development of the Cyrillic alphabet, as well as the abundance of letterforms and their applications prevalent in Russia. The result of this investigation was formal changes of the traditional form of several Russian letterforms. But since we neither read nor write Russian nor are confident in the area of Slavic languages (which proved a handicap during the project), we discussed formal changes with specialists in this area at the Slavic Institute of the University of Basle, as well as with representatives at the Russian Embassy in Switzerland. Our final proposals were approved by both references, and were also fully accepted in professional circles during the exhibit in Moscow.

Through this work and experience, we are of the opinion that further design projects in this area of modern Russian typefaces should be undertaken, especially today when these typefaces are

ΤΟΥΤΩΝ Τ^ΩΤ^ΩΡΩΝ
 ΠΛΗΘΙΟΝ ΔΟΚΕΙ
 ΣΟΙ ΓΕΓΟΝΕΝ ΑΙΤ^Η
 ΕΜ ΠΕΣΟΝΤΟΣ ΕΙ
 ΤΟΥ ΣΛΗΝΤΑΣ ΟΔΕ
 ΕΙΠΕΝ Ο ΠΟΙΗΝ ΣΑ
 ΤΟ ΕΛΕΟΣ ΜΕ ΤΑΥΤ^Η
 ΕΙΠΕΝ ΔΕ ΑΥΤΩ Ο
 ΠΟΡΕΥΟΥ ΚΑΙ ΣΟΙ
 ΠΟΙΕΙΟΜΟΙΩ ΣΕΝ
 ΔΕ ΤΩ ΠΟΡΕΥΕΣΘΗ
 ΑΥΤΟΥ ΣΑΥΤΟΣ ΕΙ^Η
 ΘΕΝ ΕΙΣ ΚΩΜΗΝ
 ΤΙΝΑ
 ΓΥΝΗ ΔΕ ΤΙΣ ΟΝΟΜΑ
 ΤΙΜΑΡΘΑΥ ΠΕΔΕ
 ΣΑΤΟ ΑΥΤΟΝ ΕΙΣ
 ΤΗΝ ΟΙΚΙΑΝ ΚΑΙ
 ΤΗ ΔΕ ΗΝ ΑΔΕΛΦΗ
 ΚΑΛΟΥΜΕΝΗ ΜΑ^Κ
 ΡΙΑ Μ^Κ ΚΑΙ ΠΑΡΑΚΑ^Ι
 ΘΕΣΘΙΣ ΑΠΡΟΣΤ^Η
 ΠΟΔΑΣ ΤΟΥ ΚΥ^Η
 ΚΟΥ ΕΤΟΝ ΛΟΓΟΝ
 ΑΥΤΟΥ· Η ΔΕ ΜΑΡ
 ΘΑ ΠΕΡΙΕΣΠΑΤΟ Π^Ε
 ΡΙ ΠΟΛΛΗΝ ΔΙΑΚ^Η
 ΝΙΑΝ
 ΕΠΙΣΤΑΣΑ ΔΕ ΕΙΠΕΝ
 ΚΕ ΟΥ ΜΕΛΙΣ ΟΙΟ
 ΤΗΝ ΑΔΕΛΦΗ ΜΟΥ
 ΜΟΝΗΝ ΜΕΚΑΤ^Η
 ΛΙ ΠΕΝ ΔΙΑΚΟΝΙΝ
 ΕΙΠΕ ΟΥΝ ΑΥΤΗ
 ΝΑ ΜΟΙΣΥΝΑΝΤΙ
 ΛΑΚΗΤΕ
 ΑΠΟΚΡΙΘΕΙΣ ΔΕ ΕΙ
 ΠΕΝ ΑΥΤΗ ΟΚ^Ε
 ΔΡΘΑ ΜΑΡΘΑ Μ^Ε
 ΡΙ ΜΝΑΣΚΑΙ ΘΟΥ

ΑΥΤΟΝ ΕΝ ΤΟΤΩ
 ΤΙΝΙ ΠΡΟΣΕΥΧΟΜ^Ε
 ΝΟΝ ΩΣ ΕΠΑΥΣΑ
 ΤΟ ΕΙΠΕΝ ΤΙΣ ΤΩΝ
 ΜΑΘΗΤΩΝ ΑΥΤΟΥ
 ΠΡΟΣΑΥΤΟΝ ΚΕΔΙ
 ΔΑΣ ΟΝΗΜΑΣ Π^Ρ
 ΕΥΧΕΣΘΗ ΚΑΘΩ^Σ
 ΕΔΙΔΑΣΕΝ ΤΟΥΣ
 ΜΑΘΗΤΑΣ ΑΥΤΟΥ
 ΕΙΠΕΝ ΔΕ ΑΥΤΟΙΣ
 ΤΑΝ ΠΡΟΣΕΥΧΗ^Ν
 ΛΕΓΕΤΕ
 ΠΑΤΕΡ ΑΓΙΑΣΘΗΤ^Η
 ΤΟ ΟΝΟΜΑ ΣΟΥ
 ΕΛΘΑΤΩ Η ΒΑΣΙΛ^{ΙΑ}
 ΛΣΟΥ ΓΕΝΗΘΗΤ^Η
 ΤΟ ΘΕΛΗΜΑ ΣΟΥ Ω^Σ
 ΕΝ ΟΥΡΑΝΩ ΟΥΤ^Η
 ΚΑΙ ΕΠΙΓΗΣ ΤΟΝ
 ΑΡΤΟΝ ΗΜΩΝ ΤΟΝ
 ΕΠΙΟΥΣΙΟΝ ΔΟΣΗ
 ΜΙΝ ΚΑΘΗΜΕΡΑ
 ΚΑΙ ΑΦΕΣΗ ΜΙΝ ΤΑ
 ΑΜΑΡΤΙΑΣ ΗΜΩΝ
 ΩΣ ΚΑΙ ΑΥΤΟΙΣ ΑΦΙ^Ε
 ΜΕΝ ΠΑΝΤΙΟΦΙ
 ΛΟΝ ΤΗ ΜΙΝ ΚΑΙ
 ΜΗ ΕΙΣΕΝΕΓΚΗ^Ν
 ΗΜΑΣ ΕΙΣ ΠΙΡΑΣΜ^Ε
 ΚΑΙ ΕΙΠΕΝ ΠΡΟΣ ΑΥ^Τ
 ΤΟΥΣ ΤΙΣ ΕΣΥΜΩΝ
 ΕΣΕΙ ΦΙΛΟΝ ΚΑΙ Π^Ε
 ΡΕΥΣΕΤΑΙ ΠΡΟΣ ΑΥ^Τ
 ΤΟΝ ΜΕΣΟΝ ΥΚΤΙ
 ΟΥ ΚΑΙ ΕΙΠΗ ΑΥΤΩ
 ΦΙΛΕΧΡΗΣ ΟΝ ΜΟΙ
 ΤΡΙΣ ΑΡΤΟΥΣ ΕΤΙ ΜΗ
 ΦΙΛΟΣ ΜΟΥ ΠΑΡΕΓ^Ε
 ΝΕΤΟ ΕΞ ΟΛΟΥ Π^Ε

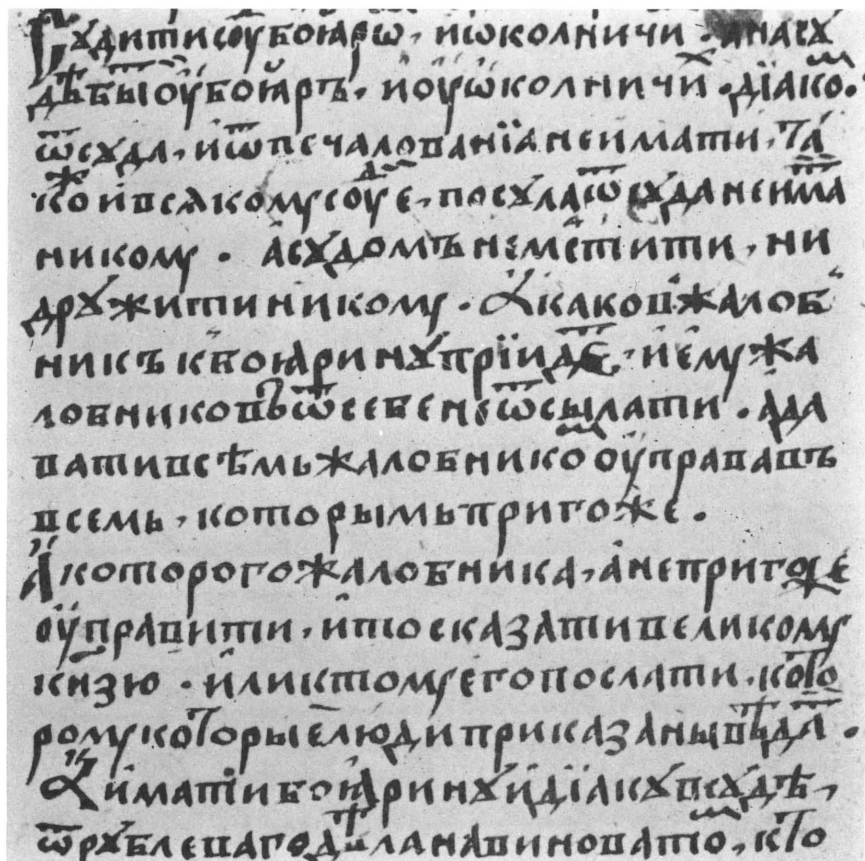
Figure 1. Greek uncial, *Codex Sinaiticus*.

being used by more and more people of different language groups.

The early Cyrillic alphabet (Fig. 2) stems principally from the nineteenth-century Greek Uncial (Fig. 1). Of the 43 characters of the Cyrillic alphabet, 24 are exact replicas of Greek forms. To these 24, new characters were then added to represent those sounds belonging specifically to the Slavic languages. These new characters were either combinations or variations of Greek signs, or were borrowed from other alphabets.

During the process of development, the forms of the Cyrillic alphabet acquired different textures as a result of the nature of the pen; some developed rounder and others more angular qualities

Figure 2. Cyrillic bookscript.



(Fig. 3). As a variation to the early book-script, a cursive hand-writing appeared in the fifteenth century (Fig. 4). The forms of this variation were connected, and in parts lavishly adorned with snail-like swirls and flourishes. This contemporary hand later influenced certain formal aspects of Russian italic typefaces.

Modern Russian printing type—based on Czar Peter the Great's reformation of early type design at the end of the seventeenth

Figure 3. Cyrillic bookscript, *Code Tschernorizec* of Antioch.

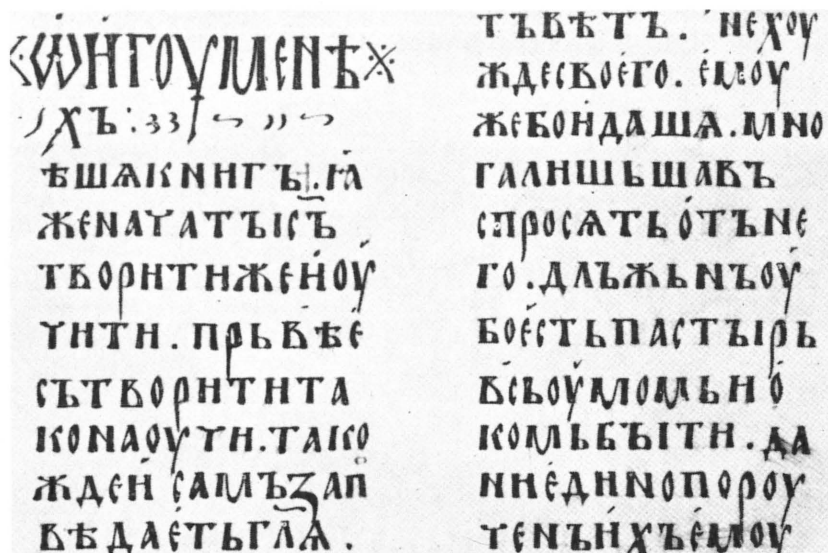
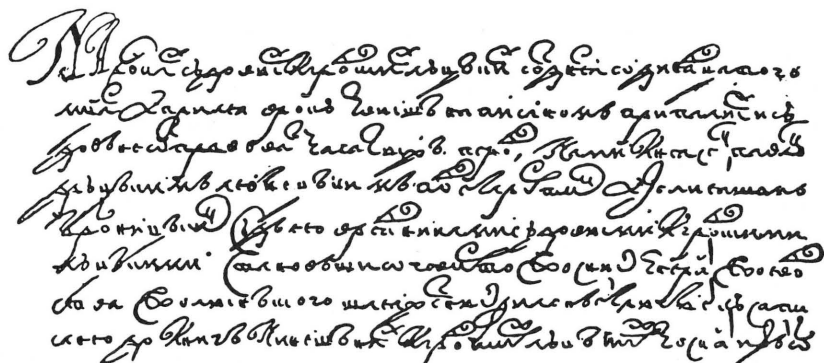


Figure 4. Early Cyrillic contemporary hand.



century (Fig. 5)—is, comparatively speaking, a slight adaption and simplification of the Cyrillic alphabet. Czarist Russia was very much devoted to all aspects of west European culture, and influences of western Europe can be seen in Russia's own cultural expression. Thus, in the year 1708, Czar Peter the Great had his so-called "Civil Type" cast in Amsterdam; at that time Amsterdam was considered the center of type manufacturing and printing. With this began the influence of the Latin characters on the texture of the Russian alphabet. (See also Ivan L. Kaldor's two-part article, "The Genesis of Russian *Grazhdanskii Shrift* or

Figure 5. Peter the Great's Civil Type.

ПЕТРОВСКИЙ
ШРИФТ
САНКТ
ПЕТЕРБУРГ
ВЕЛИКИЙ
ПЕТР

Civil Type," in earlier volumes of this journal: Part I, III [October 1969], 315-344; Part II, IV [Spring 1970], 111-138.)

The Russian typefaces were predominantly produced by west European type foundries (e.g., Figs. 6 and 7). By the formation of these Cyrillic versions of Latin types, those Cyrillic characters that were similar to Latin characters were quite simply replaced by Latin ones, and the remaining characters were more or less adapted to the style of the corresponding Latin type.

Figure 6. Neo-Didot (Russian), Monotype.

шенствованной машин
бретателя Тольбертаж
перфорированной бум
очки шрифта из поло
инженер Джон Селлес

Figure 7. Standard Series Cyrillic, Berthold.

Как рады мы теперь, что ве
на дворе тепло мороз и мет
был известным американск
между прочим изобрёл кали
фон. Что ты это приобрёлэто
приобретение. Германские

The Latin lower-case letterforms especially were mixed together with reduced Cyrillic forms—that is, with original Greek capitals—to form a Russian lower-case alphabet. The result was a mixture of various forms that outwardly exhibited a definite unity of style, but the optical-rhythmic quality of the typeface was usually neglected. This arbitrary adaptation of forms, together with the mass of vertical strokes and the angular forms in the Russian alphabet (especially in the lower-case composition of a sans-serif typeface) produced a hard and uneven rhythm. As a result, legibility was impaired.

Figure 8. Section of a page, *Iswestija* newspaper.



In the design of our Cyrillic-Gothic (Fig. 9) we were limited by the client to a conventional version of a Russian sans-serif type, one of the main objectives being to meet the needs of today. We tried, however, to counteract the previously mentioned negative aspects of existing Russian sans-serif faces by making subtle changes in individual forms and by maintaining a consequential consistency in the overall design. On the opposite page are shown different examples of individual form changes.

АБВГДЕЖЗИКЛ
МНОПРСТУФХЦ
ЧШЩЪЬЭЮЯ
абвгдежзиклмн
опрстуфхцчшщ
ъьэюя

Figure 9. Cyrillic Gothic, roman.

а р → а ρ

The Russian lower-case a and r are usually replaced by the Latin forms a and p. We designed them more like their original Greek forms alpha and rho.

ф → Ф ρ у

The Russian f, the only lower-case letter with an ascender and descender, appeared too static. Without ascender, the form still remains legible, and becomes more characteristic of lower-case.

В З Э → В З Э

The Russian lower-case v is a reduction of the Latin upper-case B. The form appears too compact because of the small counters. By opening the middle horizontal we achieved a lighter form which has a better formal relationship with other signs.

Б б → Б б

The formulation of the Russian upper- and lower-case B fit together better in our proposal.

л д → л д л д

Our first attempts to change the Russian lower-case l and d were not accepted.

ц ш щ → ц ш щ

By rounding the left verticals of these forms we achieved a more dynamic rhythm of the composition.

In general, the italic versions of present Russian typefaces were influenced by Russian handwriting and, as a result, certain of these italic forms are completely different from their corresponding upright form. The illustration below shows from left to right:

Original Cyrillic form

Russian handwritten variation

Lower-case of a present printing type

Italic variation

v	В	<i>В в</i>	В	<i>в</i>
g	Г	<i>Г г</i>	Г	<i>г</i>
d	Д	<i>Д д</i>	Д	<i>д</i>
ž	Ж	<i>Ж ж</i>	Ж	<i>ж</i>
i	И	<i>И и</i>	И	<i>и</i>
t	Т	<i>Т т</i>	Т	<i>т</i>

From the beginning we based our italic variation of Cyrillic-Gothic on the forms of the upright alphabet (Fig. 10). In other words, our italic is simply a slanted version of the upright Cyrillic-Gothic with no relationship to Russian calligraphic forms. In this manner we attained a formal unity between the two version. This seemed to us to be especially appropriate to a sans-serif type with its many variations from light to bold, and from expanded to condensed.

Figure 10. Cyrillic Gothic, roman and italic.

АБВГДЕЖЗИКЛ
МНОПРСТУФХЦ
ЧШЩЪЬЭЮЯ
абвгдежзиклмн
опрстуфхцчшщ
ъьэюя

*АБВГДЕЖЗИКЛ
МНОПРСТУФХЦ
ЧШЩЪЬЭЮЯ
абвгдежзиклмн
опрстуфхцчшщ
ъьэюя*

Как бы то ни было, но свадьба заняла весь город.
И жених и невеста были предметом общей зависти.
Всем была известна их жаркая, постоянная любовь,
долгие томленья, претерпенные с обеих сторон,
высокие достоинства обоих. Пламенные женщины
начерчивали заранее то райское блаженство,
которым будут наслаждаться молодые супруги.

**Как бы то ни было, но свадьба заняла весь город.
И жених и невеста были предметом общей зависти.
Всем была известна их жаркая, постоянная любовь,
долгие томленья, претерпенные с обеих сторон,
высокие достоинства обоих. Пламенные женщины
начерчивали заранее то райское блаженство,
которым будут наслаждаться молодые супруги.**

*Как бы то ни было, но свадьба заняла весь город.
И жених и невеста были предметом общей зависти.
Всем была известна их жаркая, постоянная любовь,
долгие томленья, претерпенные с обеих сторон,
высокие достоинства обоих. Пламенные женщины
начерчивали заранее то райское блаженство,
которым будут наслаждаться молодые супруги.*

***Как бы то ни было, но свадьба заняла весь город.
И жених и невеста были предметом общей зависти.
Всем была известна их жаркая, постоянная любовь,
долгие томленья, претерпенные с обеих сторон,
высокие достоинства обоих. Пламенные женщины
начерчивали заранее то райское блаженство,
которым будут наслаждаться молодые супруги.***

Our Cyrillic-Gothic design can hardly be considered a real innovation and not at all a reform, since it had to be directly concerned with current application. We do feel, however, that we have improved some details of contemporary sans-serif versions of the Russian alphabet, and hope that we have given incentive to type designers of the Slavic languages for further design innovation.