Hermann Zapf was hesitant to share the preliminary designs for his Optima® typeface. “I did not show anything to the type foundry until the design was finished,” Zapf recalls in his book, Alphabet Stories. “I wanted to avoid pressure by sales people until I found the best solution.” While he was able to protect his design, Zapf was denied the right to choose its name. “The sales manager of D. Stempel AG did decide on the name of the typeface,” continues Zapf. “My preference was Neu Antiqua, but this was rejected in favor of Optima.” Zapf designed Optima early in his career, when he had recognition as a gifted young designer – but not the eminence that precludes questioning.

First Optima Sketches
In 1950, Zapf was researching Italian typeface design at the Basilica di Santa Croce, in Florence, and happened upon an ancient Roman gravestone that would have been missed by most tourists and casual observers. The letters cut into the gravestone were unusual in that they lacked the traditional serifs. These delighted Zapf and appealed to his classic sense of design. The problem was that he had run out of drawing paper just prior to finding the gravestones. As a result, the first sketches for Optima were made on a 1,000-lire bank note.

Zapf worked on the design, refining character shapes and proportions for two years before he turned final drawings over to Stempel’s master punchcutter, who made the first test font. This was in 1952, but, because making fonts in metal was much more complicated and time-consuming than making fonts using current digital tools, it wasn’t until 1958 that Optima was made available as hand-set metal fonts. Matrices for the Linotype typesetter took even more time and these were not made available until two years later.

Technical Limitations
Fonts for metal typesetters, such as the Linotype and Monotype typesetters, had to be created in accordance with a crude system of predetermined character width values. Every letter had to fit within and have its spacing determined by a grid of only 18 units. This meant that
if the ideal proportions of a particular character did not fit within a subset of these 18 units, it had to be designed so that it did. Type designers often made compromises from what they felt was an ideal shape to something that would work within the confines of technology.

Because the Linotype typesetter used a “font magazine” to hold the matrices for the individual characters, and only one magazine could be put into the machine at a time, many Linotype faces were developed where the various members of the type family shared common character widths. While this allowed more than one typeface to be put into a single magazine, the unfortunate result was that italic designs had to be drawn wider and spaced more open than they should and bold designs suffered in that they had to be drawn narrower than what would be ideal, full-bodied proportions. The first machine-set fonts of Optima suffered this fate.

Serifless Roman

Although Optima is almost always grouped with typefaces such as the Helvetica® and Gill Sans® designs, it should be considered a serifless roman. Compare it with typefaces like the Garamond and Centaur® designs, and you will find similar proportions, shapes and weight stress. Where these designs have serifs, however, Optima has a slight flaring of its stroke terminals.

Zapf considered making the flared terminals even subtler than they are, but he noticed that metal fonts of sans serif typefaces tended to lose some of their crispness in the process of a lengthy press run. As a result, Zapf exaggerated the terminals somewhat to overcome this technical shortcoming.

True to its Roman heritage, Optima has wide, full-bodied characters—especially in the capitals. Only the “E,” “F” and “L” deviate with narrow forms. Consistent with other Zapf designs, the cap “S” in Optima appears slightly top-heavy with a slight tilt to the right. The “M” is splayed, and the “N,” like a serif design, has light vertical strokes. The lowercase “a” and “g” in Optima are two-storied designs.

Problematical Italic

One way Optima differs dramatically from serif types is in its italic letterforms. In the tradition of most sans serif designs, Zapf wanted his italic to be a sloped roman rather than a true cursive, but he also knew that this relatively simple design exercise (by current standards) would demand just as much time and effort as drawing a completely new design. While working on the basic roman design, Zapf heard of
a typesetting studio in New York that was able to create seemingly magical distortions of letterforms through a photographic process.

Zapf contacted the studio, Photo-Lettering Inc., and asked if it would perform a little of its magic on his drawings for Optima. Photo-Lettering agreed, and the photo distortion it created saved Zapf hundreds of preliminary sketches and trial renderings.

Other Stressed Sans
Although the most successful, Optima was not the first serifless roman typeface. The Stellar typeface, designed by R. Hunter Middleton for the Ludlow Typograph Company in 1929, predates it by several decades. This face, however, makes a stronger calligraphic statement and was limited to display usage. Stellar has been revived for digital typesetting at both text and display sizes by Dave Farey for the Monotype typeface library and as the Stellar Classic design by Jim Spiece.

In 1960, José Mendoza drew the Pascal™ typeface for the Amsterdam type foundry—a design that clearly was influenced by Zapf’s earlier work. Other newer designs that pay homage to Optima are the Mentor™ Sans face, by Michael Harvey, and the Augustal™ Cursiva design, by Jean-Renaud Cuaz.

Optima Nova
More than 50 years after the first release of Optima, Zapf was provided the unusual opportunity to redraw the design for digital typesetting. In doing so, he was able to collaborate with Akira Kobayashi, type director for the Linotype Library. The design team seized the opportunity to undo the technical concessions made in earlier versions of the typeface. The two set about correcting all the inherent spacing and proportion problems that had been the result of metal typesetting technology. They also drew a cursive italic, small capitals, condensed weights and a titling design to round out the Optima family: a full range of weights from very light to very bold, in roman, condensed and italic, as well as small caps and old style numerals. The result was released as the “Optima nova®” typeface family in 2003.

Using Optima
Optima can be set within a wide choice of line spacing values—from very tight to very open. In fact, there are virtually no limits to the amount of white space that can be added between lines of text. As an example, Zapf once created an exceptionally lovely and highly readable book using Optima set 9 on 24 point.
Optima is about as gregarious as a typeface can be. It mixes well with virtually any serif design and a surprisingly large number of sans serifs.

Optima also benefits from a wide range of letterspacing capability. It can be set quite tight, with spacing as established by Linotype, or even letter spaced. If there are any guidelines, Optima should be set more open than tight. It’s not that readability is affected that much when Optima is set on the snug side; it’s just that the unhurried elegance and light gray color created by the face are disrupted by letters that are set too tight.

Optima is also about as gregarious as a typeface can be. It mixes well with virtually any serif design and a surprisingly large number of sans serif faces.

The Optima typeface is an excellent communicator, and the added benefit is that it does so with beauty and grace.