

**Musical Instruments**

by: Patrycja Weglarz

Typography II

Experimental Typography

Instructor: Linda Bracamontes

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## History

The letterforms began with the influence of Greek type on the Roman alphabet. They later evolved with blackletter & the printing press and moveable type.

The history of Greek type began with phonetics. The Greeks supported the invention and around 800 B.C. they added vowels and symbols of their own to make their letters simple. To make their reading easier, they would read from left to right and then from right to left, changing the orientation of the letters on the next line by using the technique in a zigzag appearance. This process allowed the reader to scan the text by a non-stop eye movement, never needing to return to the edge of the column. Letters were created from the same basic lines and shapes repeating the stroke movement, thus constructing the letter based on a geometric form and the same consistent upper-case size for all of the letters.

The Latin alphabet was introduced to the Romans from Greece. The Romans made even more changes in the alphabet than the Greeks, which enabled the letters to be more like the ones we use today. Not only did the letters change, there were additional letters created and added to the alphabet, as well as carving elegance for better legibility. Romans were very proud of their accomplishment. The purpose of this specific type was designed for beauty and solidity. The simple and beautiful geometric lines were drawn in thick and thin strokes, with organically combined straight and curved lines. Like the Greeks, Romans also focused on the basic shapes of geometry, i.e., the square, triangle and circle. Attention was also focused on the spacing between each letter and the shapes that the letter had inside. There was great thought put into the letters in order to make them perfect. The serifs that were created on the Roman type are still questioned today if they were intended or not. Some say it was a chisel mark from the clean up, others say that it was the begging mark made with the chisel. Regardless of what happened, the Roman type looks beautiful and is still used today. No matter if it was a clean up or a mark on the letter, we use it today as intentional writing.

Blackletter type, also known as German Gothic, originated with Gutenberg's moveable type, and was based on the present-day lettering of that time. John Gutenberg, who is recognized as the inventor of the movable type, was a goldsmith and businessman from southern Germany. He "invented" the type by carving and then molding the letters. The letters were first carved out in an alphabetical structure, and then metal was punched in and out. After that, the molten metal was poured into the letter creating the perfect shaped letters. They were then set on the printing press and pressed on to the paper. It was then when the first book was printed, the Gutenberg Bible. This procedure of movable type changed the way books are made. Before the movable type, people had to re-write the books by hand, which took months or even years to do. Not only has the movable type save us, time but also made our lives easier.

The innovations created by the Greeks, Romans and John Gutenberg many years ago created a lasting influence on the printing world that are still used today in our very modern, computerized world.

## **Serif Typefaces**

Serif typefaces have cross-lines at the end of a stroke and are either slab, wedge or hair. There are four major classifications for serif faces:

Old Style dates from the 1490s, they have the weight stress of the rounded forms at an angle. The serifs are bracketed by a tapered curved line. The top serifs on the lowercase letters are at an angle. Characterized by the minimal contrast between the vertical and horizontal strokes, the uneven concave serifs, Old Style is an adaptation of Roman types and was popular during Renaissance, Baroque and Classicist periods. Old Style became a popular choice over the ornate handwritten manuscript miniscule's because of its readability and legibility.

Transitional or transitive is a type of serif that flows directly into or out of the main stroke without stopping to reverse direction, typical of many italics. The thick and thin strokes of the letterforms are of greater contrast than in Old Style faces. The characters are usually wider than Old Style faces. The name of this category of types comes from the transitional period in the eighteenth century when the field of scientific study was gaining momentum against the ideas already established by religion. The typefaces from this era rely heavily on scientific or mathematical principles. The types became regular and precise, round characters that have a vertical axis or are barely inclined and the hairlines and the main strokes of the letter have greater contrast than before; the serifs are thin, flat and bracketed.

Modern is often used to describe styles that have regular shape construction, extreme contrasts of thick and thin strokes, precisely constructed forms, and straight hairline serifs. Although the word for modern has been used for a number of different eras, in typography it refers to a classification of typefaces which emerged in the eighteenth century. Modern faces increased the contrast between the horizontal and the vertical strokes of a letter. The full round letters of the Old Style were replaced by narrower letters of the modern faces. This interest in detail flowed mainly from copperplate engraving, where the engraver's burin could create extremely fine lines. Typographers imitated this detail in their new faces.

Slab Serifs have an abrupt or adnate serif of the same thickness as the main stroke. Slab serifs are the hallmark of the so called Egyptian and Clarendon type. With the advent of what we know today as the "industrial revolution" during the early nineteenth century, printed matter was gaining speed. Communication brought posters and flyers to the forefront of society, with a need for bold printing types that could grab attention. These bold faces were created without brackets, the cross strokes were left without termination and the strokes were all similar in weight. This unfinished look proved effective in commanding a reader's attention.

Trumpet  
brass wind  
musical instrument  
of part cylindrical,  
part conical bore,  
in the shape of a flattened loop  
and having three piston valves  
to regulate the pitch



musical instrument  
ancient instrument  
military instrument  
jazz instrument



#### Garamond

Claude Garamond, who died in 1561, was one of several great typesetters at work in Paris during the early sixteenth century. He was a printer, publisher, and type designer whose types were modeled on those of Venetian printers from the end of the previous century.

Garamond's romans are stately High Renaissance forms with humanist axis, moderate contrast and long extenders. He cut several beautiful italics as well, with some of the first sloped capitals, but he took no apparent interest in the radical new idea of pairing italics with romans. Revivals of his roman faces are often mated instead with italics based on the work of his younger colleague Robert Granjon. Three Garamond and Garamond/Granjon revivals worthy of serious consideration are: Stempel Garamond, issued by the Stempel foundry in 1924 and later digitized by Linotype; Granjon, drawn by George William Jones and issued by Linotype in 1928-now also in Linotype digital library; Adobe Garamond, drawn by Robert Slimbach, issued in digital form by Adobe in 1989.

Adobe designer Robert Slimbach went to the Plantin-Moretus museum in Antwerp, Belgium, to study the original Garamond typefaces. These served as the basis for the design of the Adobe Garamond romans; the italics are based on types by Robert Granjon. Jan Tschicold's Sabon, is also closely based on Garamond's originals. Distinctly non-Garamondian type based on the work of Jean Jannon is also sold under the name Garamond. Adobe Garamond is shown here.



1701; Johann Christoph Denner invented the basic structure of what we know today as a clarinet

1749; Rameau introduced clarinet in Paris

1751; J.C. Bach introduced clarinet in London

1762; Louis XV established French Army Band with clarinet

1809; Rossini's Theme and Variations

1812; Ivan Mueller invented clarinet with thirteen keys

1832; Boehm System clarinet was introduced

# Clarinet



1885; Selmer started manufacturing clarinet

1919; Stranvinsky's Three Pieces. This song is written for clarinet alone, for Woody Herman

1921; Sonate for clarinet by Saint-Saens

1929; Carl Nielsen's Concerto for Clarinet

1947; Aaron Copland's clarinet concerto.

Baskerville

Originally a metal type designed for hand composition. Roman and italic, designed by John Baskerville a typefounder and printer in late eighteenth-century England, and introduced in Birmingham, England, in 1752. It was cut for him by John Handy. This is the epitome of neoclassicism and eighteenth-century rationalism in type, and the face was far more popular in Republican France and the American colonies than in eighteenth-century England, where it was made.

Many of the digital faces sold under Baskerville's name are passably faithful to his designs, but small caps and text figures, often omitted, are essential to the spirit of the original, and to an even flow of text.

The digital version shown is Mrs. Eaves. It is named after Sarah Eaves, John Baskerville's housekeeper, who later became his wife after the death of her husband. Mrs Eaves is an historical revival based on the design of Baskerville. Designed by Zuzana Licko in 1996. "In translating this classic to today's digital font technology, I focused on capturing the warmth and softness of letterpress printing that often occurs due to the 'gain' of impression and ink spread."



# Violin

*family of stringed musical instruments  
having wooden bodies  
whose backs and fronts are slightly convex,  
the fronts pierced by two-shaped resonance holes.*

## **Bodoni**

Giambattista Bodoni of Parma, one of the most prolific of all type designers, is also the nearest typographic counterpart to Byron and Liszt. He is typography's arch-romantic. His hundreds of faces, designed between 1765 and his death in 1813, embrace considerable variety, and more than 25,000 of his punches are in the Bodoni Museum of Parma.

Around 1790 Bodoni redesigned the roman letterforms with a more mathematical, geometric, and mechanical appearance. He reinvented the serif by making them hairlines that formed sharp right angles with the upright strokes, eliminating the tapered flow of the serif into the upright stroke as in Old Style roman. The thin strokes of his letterforms were trimmed to the weight of the hairline serifs, creating brilliant sharpness and a dazzling contrast not seen before. This regularity - the standardization of the units - was a concept of the emerging industrial era of the machine.

The revivals issued in his name reflect only a tiny part of his legacy, and many are simply parodies of his ideas. In the absence of any true copies of Bodoni's types, many typographers prefer the Bodoni cut by Louis Hoell under the direction of Heinrich Jost, for the Bauer Foundry, Frankfurt, in 1924, and the Berthold Foundry version, produced in 1930. Both have now been issued in digital form. Small caps and text figures are available for both the Bauer and Berthold fonts, and they are essential to these designs. The version shown is Bauer Bodoni.



# Conga Drums

## **A percussion instrument**

consisting of a hollow cylinder or hemisphere

with a membrane stretched tightly over one or both ends,

**played by beating**

**with the hands or sticks.**

### **Serifa**

The Swiss type designer Adrian Frutiger has described Serifa as Univers with Serifs. It was designed for the Bauer Foundry in 1967. Unlike Univers, however, Frutiger did not use a numerical coding system to distinguish one variant of the type family from another; instead he used traditional terminology.

The letterforms are based on those of Frutiger's earlier sanserif design, Univers. Square, unbracketed serifshave been added, making this a slab serif typeface. Usually, slab serif types are blocky and difficult to read in text, but Serifa has humanistic forms that are highly readable for both text and display. Serifa's letters are extended and open and its italic is a slanted Roman face. Serifa has all the characteristics that make Univers readable as a sanserif face, but the addition of serifs further enhances this quality.

## **Sanserif**

Sanserif typefaces have a history at least as long, and quite as distinguished, as serified letters. Sanserif capitals appear in the earliest Greek inscriptions. They reappear at Rome in the third and second centuries BC, and in Florence in the early Renaissance. Perhaps it is no more an accident of history that the sanserif letters of the fifteenth-century Florentine architects and sculptors were not translated into metal type in the 1470s.

Sanserif types were first cut in the eighteenth century for alphabets other than Latin (Greek and Cyrillic). Most of these types were dark, coarse and tightly closed.

During the twentieth century, sanserifs have evolved toward much greater subtlety, and in this evolution there seem to be three major factors. One is the study of archaic Greek inscriptions, with their light, limber stroke and large aperture called Grotesque. Another is the pursuit of geometry: typographic meditation first on the circle and the line, then on more complex geometric figures. These are called Geometric and influenced by Bauhaus design. The third is the study of Renaissance calligraphy and humanistic form - vitally important in the recent history of serified and sanserif alike. These are called Humanist sanserifs and contains some features of serif typefaces.



**ADOLPHE SAX**

**The saxophone was invented by Adolphe Sax,**  
who was born November 6, 1814 in Belgium.

**Sax's father manufactured instruments,**  
so Sax learned the skill of instrument making at an early stage.



**He redesigned the bass clarinet**  
to a greatly improved standard,  
but he also wanted to produce an instrument  
that played in octaves rather than fifths.

**So, the saxophone was created.**

#### Futura

Designed by Paul Renner in 1924-26 and based by the Bauer Foundry, Frankfurt, in 1927. Futura is the classic example of a geometric sans-serif type. Its original concept was based on the Bauhaus design philosophy that "form follows function."

Futura had fifteen alphabets, including four italics and two unusual display fonts, and became the most widely used geometric sans-serif family. Futura uses basic geometric proportions with no weight strokes, serifs, or flits, with long ascenders and descenders that give it more elegance than most sans-serif typefaces.

Geometric though it is, Futura is one of the most harmonious and rhythmical sans-serifs ever made. Its proportions are graceful and humane. Many copies have been made in metal, film and digital form. By no means all these cuts are equally made - and not all the weights added to the family in later years are Renner's own designs. Test figures were included in Renner's original design, but Bauer never issued them in metal. Addition of serifs further enhances this quality.



# Musical instrument

consisting of a rectangular bellows

expanded and contracted

between the hands.

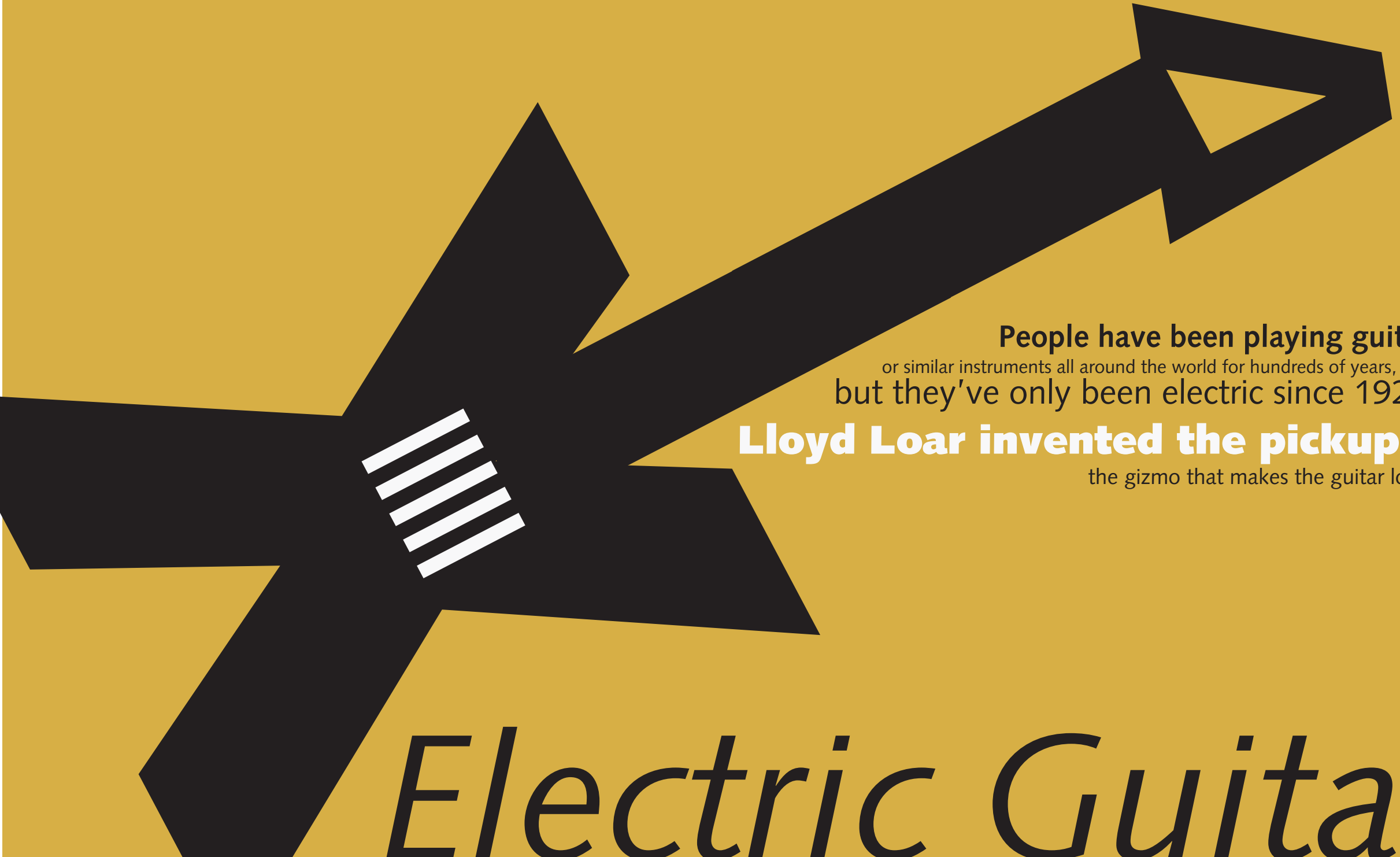
Buttons or keys  
operated by the player open valves,  
allowing air to enter  
or to escape.

Univers

In 1954, a young Swiss designer working in Paris, Adrian Frutiger, completed a visually programmed family of twenty-one fonts. As a student in Zurich, Adrian Frutiger began work on Univers, which would eventually be released in 1957 by the Deberny & Peignot foundry in Paris. The design is a neo-grotesque, similar to its contemporary, Helvetica.

The palette of typographic variations - limited to regular, italic, and bold in traditional typography - was expanded sevenfold. Conventional nomenclature was replaced by numbers. The normal or regular weight with the proper black and white relationships for book setting is called Univers 55, and the family ranges from Univers 39 (light/extra condensed) to Univers 83 (expanded/extrabold). Because all twenty-one fonts have the same x-height and ascender and descender lengths, they create a uniform whole that can be used together with complete harmony. The size and weight of the capitals are close to the size and weight of the lowercase characters; therefore, the texture and tone of a Univers text setting is more uniform than most earlier typefaces. Frutiger labored three years on Univers.

Recently Frutiger, in conjunction with Linotype, has revised Univers and expanded it to 59 weights. A three digit numeration distinguishes it from the old Univers. All weights in each style of Linotype Univers are arranged so that the width of the type image increases in direct proportion to the stroke thickness. Shown is the original Univers.



People have been playing guitars  
or similar instruments all around the world for hundreds of years,  
but they've only been electric since 1923.

**Lloyd Loar invented the pickup,**  
the gizmo that makes the guitar louder.

*Electric Guitar*



It takes the sound  
from the strings of the guitar  
*and sends them to an amplifier.*

**This increases**  
the volume of the guitar.

#### Syntax

Designed by Hans Eduard Meier for the Stempel foundry in 1968, Syntax is based on both Renaissance minuscule writing and Roman lapidary capitals. The design is a blend of a monoline sanserif with a more lively humanistic roman, resulting in a highly legible sanserif type with a wide range of uses.

The roman is a true neohumanist sanserif, in which Renaissance forms are clearly visible. The italic, however, is a hybrid, primarily sloped roman. Close scrutiny reveals that Syntax, the roman, is sloped too. The italic slopes at 11 degrees and the roman at something close to half a degree. Little as it is, half a degree is enough to add perceptible vitality and motion to the forms. The stroke is subtly modulated, and the stroke ends are trimmed at a variety of angles. There are several weights, but with this, as with neohumanist faces generally, the weights above semibold are severely distorted. Syntax was the first sanserif of its kind and may possibly be one of the best sanserif romans ever made. Its drawbacks for text purposes are the absence of text figures and small caps, and the hybrid character of the italic.

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<http://www.cbc.ca/kids/>

**Colophon**

paper: hp brochure and flyer, gloss, inkjet 44lb

fonts: Helvetica, Garamond, Baskerville, Bodoni, Serifa, Futura, Univers & Syntax

printer: hp deskjet 3820

computer: PC - Windows XP

program: Adobe Illustrator & QuarkXPress