

The Lifestory of Hermann Zapf

◆ I've been asked to tell you about myself and my types.

My story begins in Nuremberg, where I was born on the 8th November 1918. Those were turbulent days. On the day I was born, a workers' and soldiers' council took political control of the city. Munich and Berlin were rocked by revolution. The war ended, and the Republic was declared in Berlin on the 9th November 1918. The next day Kaiser Wilhelm II fled to Holland. To add to the chaos, the Spanish flu took hold of Europe in 1918 and 1919. It is estimated to have killed some 20 million people, more than the total number of lives lost by Germany and the Allies put together during the First World War. Two of my siblings died in the flu epidemic of 1918.

◆ My school years

A famine hit Germany, reaching its peak in 1920. In 1925 my mother was relieved to send me to school, where I received a Quaker meal each day. This was a program organized by Herbert Hoover, who later became president of the USA. During my school years I was primarily interested in technical subjects. The librarian in my local library was surprised by all the publications I wanted to read. One of my favorite books was the annual »Das neue Universum« (The New Universe), which was a wonderful way of acquainting oneself with all the latest inventions and discoveries.

One of the things I did during those years was to build a detector radio, otherwise known as a crystal set, together with my brother, who was four years my senior. At night we listened to the radio under the bedclothes. Naturally we had to keep all our antics a secret from our parents and to ensure that we could do what we liked without being found out, we set up



My school years in Nuremberg

various warning systems in the house – door handle contacts for example, low voltage of course. Our ingenious system worked perfectly, sounding a warning bell in the cellar as soon as the garden gate was opened. This went on until the day my father discovered the wires whilst digging in the garden. Even during those early years, I was already getting involved with types. I invented the strangest forms of secret writing to enabling us to exchange information. They were some kind of cross between Germanic runes and Cyrillic, and could only be deciphered if you knew the code. This was around 1930. My despairing mother could not make head nor tail of them. That's over 70 years ago now, and I suppose they constituted my first alphabetic creations.

When I left school in 1933 my ambition was to become an electrical engineer. But earlier that year my father became unemployed and he had terrible trouble with the new regime.

Prior to 1933 my father had been greatly involved with the unions and in March of that year he was sent to the camp Dachau for a short time.

◆ **First step into lettering**

Given the new political circumstances, I was not allowed to attend the Ohm Polytechnical Institute in Nuremberg. It was not until 30 years later in the United States that I was able to fulfill the dreams of my youth with computer technology.

This meant that I had to find an apprenticeship. Since I was good at drawing, my teachers – who were aware of our political problems – suggested that I should become a lithographer. Ten months passed before I found an apprenticeship in 1934. Every time I went for an interview, I was asked

First step into lettering

political questions. I was told that they liked my work, but couldn't take me on. The last company in the telephone directory was the only one that didn't ask me any political questions. They also agreed that my work was good, but they didn't do lithography and didn't need an apprentice lithographer. Instead, they said I could become a retoucher, and could start the following Monday. I accepted straight away, and rushed home on my bike to consult the dictionary to find out what a retoucher was. And so I became a photo-retoucher, starting my 4-year apprenticeship in February 1934.

In 1935 there was an exhibition in the Norishalle in Nuremberg in memory of the Nuremberger Rudolf Koch (1876-1934). He passed away on the 9th April 1934. It was at this exhibition that I first became interested in lettering. I bought Koch's book »Das Schreiben als Kunstfertigkeit« (The Art of Writing) and a textbook about lettering by Edward Johnston, »Writing and Illuminating and Lettering«. Using these two books, I taught myself calligraphy at home using a broad-edged pen. I also studied historical examples in the Nuremberg city library.

It didn't take long before my master discovered that I was good at calligraphy. After that I was mainly given lettering retouching work to do and often had to work overtime to improve my colleagues' retouching work. I rarely got home before 8 p.m. My parents were angry but of course they couldn't do anything about it.

When it came to taking the journeyman's examination at the trade corporation in 1938, my father said I should refuse to sit it because I was made to do so many other tasks during my apprenticeship. In a time when absolute obedience was paramount, to act in such a way would have caused a lot of problems. It was unthinkable to do otherwise.

From Nuremberg to Frankfurt

◆ **From Nuremberg to Frankfurt**

On the day I finished my apprenticeship, I handed in my notice and a few days later went to Frankfurt – without a journeyman's certificate. I wouldn't have stood a chance of getting a work permit for another company in Nuremberg. They could check up on everything using the so-called labor-book that everyone had to have.

In Frankfurt I went to the »Werkstatt Haus zum Fürsteneck«, which was run by Paul Koch, son of Rudolf Koch. The Haus zum Fürsteneck was a beautiful building dating from around 1360. It stood on the Weckmarkt corner of the Fahrgasse and was completely destroyed during the 1944 air raids on Frankfurt.

Most of my time there was spent in typography and writing songbooks. I learned a lot during my time at the Werkstatt Haus zum Fürsteneck. All my colleagues were specialists covering a wide range of subjects. One of the hallmarks of Paul Koch was his musical notation printing on the old manual press.

It was through the print historian Gustav Mori that I first came into contact with the D. Stempel AG type foundry and Linotype GmbH in Frankfurt. I designed my first printed type for them in 1938, a fraktur type called »Gilgengart«. On the 1st April 1939 I was called up to reinforce the Siegfried Line against France near Pirmasens. I wasn't used to hard labor, my hand being skilled in the use of a brush rather than a heavy spade. After a few weeks I developed heart trouble and was sent to the office. There I wrote out the camp records and sports certificates in my best fraktur letters.

At the cartographic unit in the army

In early September 1939, when war had broke out and our entire Arbeitsdienst unit was to be taken into the Wehrmacht, I was informed that unfortunately, due to my heart complaint, I was not going to be transferred, but would be dismissed. It was not I who was sad about this, but my comrades who had to stay at the French border. However, on the 1st April – this time in 1942 and not an April fool's joke in sight – the Prussians summoned me to do my bit for the war effort. They were not sending me to the airforce, for which I had been selected, but instead to the artillery in Weimar. That's just the way it is in the army. I had problems with my superiors from day one.

During training I often confused my left and my right, a problem which I still have today. To make matters worse, I was over cautious and very clumsy with our guns. I soon had the officers in a state of despair and brought a premature end to my career in the artillery.

◆ **At the cartographic unit in the army**

I was no longer welcome on the parade ground. I was first sent back to the office and then to Jüterbog to train as a cartographer. From there I went to Dijon and then on to Bordeaux to the staff of the 1st Army.

In Bordeaux I drew secret maps of Spain, especially of the railway networks, from Irun on the French border near Biarritz down to La Linea in southern Spain. The plan was to conquer Gibraltar from the land side using heavy railway artillery. But Franco, that sly fox, mistrusted his »friend« Adolfo (the way he addressed the Führer) and only used narrow gauge tracks to repair the railway bridges destroyed during the civil war. Of course these tracks were of no use to the mighty railway artillery.

Bordeaux and the end of the war

I was quite happy in the cartography unit. But these backup units were forever being combed for young soldiers who could be commissioned. We called it »stealing heroes«. Being only 25 years old, my turn eventually came. However my officer in the cartography unit was anxious to keep me, and sang praises for my special skill in drawing maps of Spain. While he was speaking, I took a fine brush and wrote out the general's name without glasses or a magnifying glass. He took a close look at it, and his monocle fell off. Without a word of praise he continued on his way, and I remained the youngest cartographer in the German army. So you see the fateful effects that letters 1 mm large can have.

I had a reasonable amount of free time in Bordeaux and was able to do some work in my sketch book. In 1944 I wrote out Hans von Weber's »Junggesellentext«, which would be reproduced in its original size over 50 years later when Linotype was showing Zapfino Script. The amazing thing is that I didn't need glasses or even a magnifying glass back then to write such small letters. What excellent eyesight I had!

At the end of the war I was held by the French as a prisoner of war in a field hospital in Tübingen. I was treated very well and they even let me keep my drawing instruments. They had a great deal of respect for me as an »artiste« and I think the French still have this respect today.

Since I was in very poor health, the French sent me home just four weeks after the end of the war. I first went back to my parents in my home town of Nuremberg, which had suffered terrible damage. It took a very long time before life in the city returned to normal.

I gave my first calligraphy lesson in Nuremberg in 1946. There were hardly any teachers in Nuremberg who were politically untainted. The lessons were

›Feder and Stichel‹ Alphabets and Pages of Calligraphy

part of a program aimed at building the German Federation of Trade Unions.

We wrote out our letters in an old school building under very primitive circumstances. The classroom had almost no glass in the windows, some had merely been papered over, and we had to work by artificial light. The light bulbs even had to be returned to the caretaker after the lesson. After all, they were in short supply in 1946.

In 1947 I went back to Frankfurt, where the Stempel type foundry had offered me a position as artistic head of the in-house printshop. I was not yet 30 years of age and they didn't ask for qualifications, journeyman's certificates, or references. All I had to do was show them my 3 sketch books from the war, which contained my drawings and writings, and the calligraphic piece I mentioned earlier.

◆ »Feder and Stichel« Alphabets and Pages of Calligraphy

A noteworthy product of those post-war years, when we worked in truly miserable conditions, is the publication »Feder und Stichel« (Pen and Graver). The 25 plates were cut in metal by the punchcutter August Rosenberger. I designed them between 1939 and 1941 and Rosenberger cut them during the air raids on Frankfurt – just imagine! He was one of the great masters of his trade. In 1949 the book was printed in the printshop at D. Stempel AG.

Between 1948 and 1950 I gave calligraphy lessons at the Arts and Crafts School in Offenbach, which is now the School of Design. I was not the class teacher for calligraphy, that was my friend Karlgeorg Hoefer. I only taught lettering twice a week to the two classes of graphics students. In 1951 I married Gudrun von Hesse. She was a teacher at the Städel school in Frankfurt.

The Typefaces Palatino and Optima

Suspicious minds might believe that I was marrying away the competition, just as big companies do today. But there's no truth in that. I think my wife demonstrated her remarkable independence and artistic skills at her exhibition »Bucheinbände – Graphische Arbeiten – Alphabete für Druckschriften« (Book Binding – Graphic Design – Alphabets for Printing Types) in Darmstadt in the autumn of 1998.

My main work as a graphic artist involved book design for publishing houses. I worked for Suhrkamp, Insel, the Book Guild Gutenberg in Frankfurt, Hanser in Munich, Dr. Ludwig Reichert in Wiesbaden, Philipp von Zabern in Mainz and various other publishers. As a matter of principle I did not work for advertising agencies.

Other important areas of activity included the development of printing types, such as Palatino Antiqua, Optima, etc., alphabets for hot metal composition, then for phototypesetting, and finally for the digital resolution of types. You're sure to find some of my types on your Mac or PC.

♦ The typefaces Palatino and Optima

The Palatino alphabet was designed after many careful studies together with the punchcutter August Rosenberger. Even such small details as the serifs were carefully scrutinized. In 1948 tests in offset printing were made, especially in connection with the weight of the serifs. You see how important such serifs are!

The type Palatino is named after the Italian writing master of the 16th century Giambattista Palatino. I hope he will forgive me once a day in heaven and give me his blessing for using his good name. I had no intention of disturbing his fame.

New technical Developments

Optima, designed in 1952, was released 1958 by the D. Stempel AG typefoundry in Frankfurt. It is an unusual sans-serif type. The letters were based on the Golden Section and developed after studies and sketches done in Italy in 1950. It is an alphabet design between a Roman (like Bodoni) and a sans-serif (like Futura). Optima was first intended as a display face. But after showing proofs in 1954 to Monroe Wheeler of The Museum of Modern Art in New York, I followed his suggestion to change the design into a text type, to later have an opportunity to replace sans-serif alphabets in art books, magazines and other publications. The name »Optima« was not my idea at all. I find it too presumptuous; it was the invention of the sales people at Stempels. It goes without saying that life is not always easy for a freelance graphic artist. You have bad times as well as good. I used the bad times to do calligraphic work for myself.

During all those years, I've only had a few calligraphic jobs. The biggest was writing out the Preamble of the Charter of the United Nations in 4 languages, including Russian. That was in 1960 for the Pierpont Morgan Library in New York and I was paid 1000 dollars. That was a lot of money in those days. A copy of this work has been on display since 1993 in my permanent exhibition in the Herzog August Library in Wolfenbüttel.

◆ New technical developments

In the sixties the radical move from the Gutenberg principle towards typesetting production began. It started with phototypesetting and then went digital when Dr. Rudolf Hell invented the Digiset photocomposition machine in 1964.

Typographic computer programs

I have witnessed and participated in all the stages of type production. From hot metal composition in the fifties, phototypesetting, and through to today's digital methods. It's been an exciting time with all the radical changes that the printing industry has seen.

Since the early 1960s, I have been working on the use of typography in computer programs. When you are a book designer, you are always looking for ways of simplifying production. In particular you need precise typesetting details, for which I was well known among the publishers. But there was also room for improvement in the technical process.

At first my ideas about computer-aided typesetting were not taken seriously in Germany and were even rejected at the Technical Institute in Darmstadt, where I lectured in typography from 1972 to 1981. The director of a major company – which is no longer in existence – thought that it was unrealistic to apply modular structures to typesetting with the aid of a computer. »That Zapf is crazy«, he said, as I later discovered, »he should stay with alphabets«.

Of course nobody could have predicted that computerized typography would be the order of the day a few years later. These days computers are run-of-the-mill. Even children of pre-school age are playing with them.

► Typographic computer programs

Since nobody wanted to hear about my ideas in Germany, I had no choice but to go to the USA. The Americans were more open to such new and unconventional things and they still have something of their old pioneering spirit. In my lectures there I developed my ideas about computerized typesetting programs. My moment came when I was invited to speak to the

A new start in Darmstadt

students at the Carpenter Center for the Visual Arts at Harvard University in Cambridge, Massachusetts in 1964.

This got the University of Texas in Austin interested too. They made a very generous offer, saying they would create a special professorship for me. The Governor made me an Honorary Citizen of Texas – which might have exempted me from taxes – and presented me with a huge flag of the State of Texas, which had once flown over the Capitol building in Austin. Moreover, Austin is a very attractive university town, and is nothing like the way one otherwise pictures Texan cities.

Back home I told my wife the whole story. She listened patiently. Then she said that was all well and good, but she would never go to Texas. Unfortunately my wife had only seen Texas from the air, when we once flew over those endless oil fields on our way to San Diego. So that was the end of my Texan dream.

Since the American plan had come to nothing and our house in Frankfurt had become too small – even though I had my studio in the old city gate building in Dreieichenhain, which dates from 1460 – we took the opportunity to move to Darmstadt in 1972.

Princess Margaret of Hessen had a plan to revive the tradition of the Ernst Ludwig Press, under the name »Prince Ludwig Press« in memory of her husband, who died in 1966. Dr. Dolf Sternberger was to be in charge of the literary part and I was to be responsible for equipment and printing. Unfortunately the project never got off the ground for want of funds. We had all known from the start that the press would not generate any profits.

Teaching at Rochester Institute of Technology

In 1976, the Rochester Institute of Technology asked me whether I would take over from Professor Alexander Lawson when he retired. They wanted to set up a special professorship for typographic computer programs, the first of its kind in the world. I taught there from 1977 until 1987, flying back and forth between Darmstadt and Rochester. In Rochester I got the chance to develop my ideas further, particularly once I had made contacts with companies like IBM and Xerox through my students. I also learned a great deal from the computer specialists during our discussions, which often continued into the night.

In 1977 my friends Aaron Burns, Herb Lubalin and I founded »Design Processing International Inc.« in New York. The aim was to develop programs for typographic structures based on a variable menu and for use by non-specialists. The company existed until 1986. After the death of Herb Lubalin, we started afresh, setting up »Zapf, Burns & Company« in New York in 1987. Sadly in 1991 my partner Aaron Burns died of AIDS, which he had contracted from a blood transfusion during a heart bypass operation in 1982. He had been responsible for our marketing. To add to his troubles, two of our employees had taken my ideas and started a company of their own shortly before his death. That was the last straw for Burns, and a terrible experience for both of us. Of course, it was also not practical for me to run a company in the USA from Darmstadt. I couldn't even take legal action but I didn't want to move to New York. Anyone who has seen our house on the Rosenhöhe in Darmstadt will understand why.

I put all the experience I had gathered in the USA into developing a new and very ambitious composition program for the improvement of typesetting quality. We called it the »hz program«.

The Zapfino story

I developed it in conjunction with URW Software & Type GmbH in Hamburg. It is still not quite finished because we are forever trying to get new possibilities out of the existing basic structure. Computer technology is developing at a breathtaking pace and it's difficult to keep up.

► The Zapfino story

But let's get back to types. In the last few years I have only added to my existing Palatino type, using Greek and Cyrillic characters in particular. That was for Microsoft. The type in the OpenType format has over 5492 figures including all the foreign character sets.

Next came Zapfino Script, of which Linotype GmbH produced a poster on my birthday in 1998. The story of Zapfino goes back to 1993. I had just completed an extensive project with Donald Knuth and David Siegel at Stanford University for the American Mathematical Society. We had developed a typeface for mathematical composition incorporating fraktur, Greek, and so on. It was particularly interesting to work with Donald Knuth, Professor of Computer Programming at Stanford. David Siegel had just completed his studies at Stanford, and had time on his hands. He wanted to get into the type business, and approached me for help.

He was an extremely bright fellow, but rather crazy too. He wrote to me, saying that he had a fantastic idea which needs a new kind of typeface which had to have a large number of variations. It was all part of an art chaos program, which was a popular theme among the students at Stanford at that time. David Siegel wanted to start at once by using a calligraphic example which I reproduced in a publication by the Society of Typographic Arts, Chicago. This was the wrong way to go and I was very worried about it.

Zapfino finished by Linotype Library GmbH

While I was interested in working on a complicated program, I was a little concerned about starting something new.

But then I remembered the page of calligraphy in my sketch book from 1944. Perhaps now was my chance to make a typeface out of it. I had tried to do just that with the Virtuosa script for D. Stempel AG back in 1948, but the result was only a compromise. Hot metal composition placed too many limitations on the freedom of the swash characters. It was only with modern digital technology that I achieved the pleasing result you can see today.

For the digitization of the project, David Siegel took on Gino Lee, a programmer from Boston, who was bursting with enthusiasm from the very beginning, and was even prepared to move to Palo Alto. It was a pleasure to work with him, and I hardly had to correct his work at all.

But just when everything was nearly done, I received a sad letter from Dave Siegel. His girlfriend had left him. He had no interest in anything anymore. No more types for him. It was all I could do to convince him perhaps not to take his own life. After all, I said, there are plenty more pretty girls in California, and elsewhere besides.

He said he wanted to make a new life for himself, but unfortunately he had practically lost all interest in the complicated software on which we had worked so hard together. In any case, it would never work as the lucky-chance program, »Derrick«, that we had first intended. At least not in the early 90s. There would have been far too much programming involved.

David Siegel turned to something quite different – introducing color to Macintosh computers. Purple, green, even marble or wood grain. More recently he has become an Internet design expert. Those of you in the business may have read his book, »Secrets of Successful Web Sites«.

The film »The Art of Hermann Zapf«

With all these ups and downs, the development of Zapfino had been seriously delayed. That was until I plucked up the courage to show the project to Linotype, who were prepared to complete it. Linotype put the whole bulk into some semblance of order. We eventually agreed on 4 alphabets, throwing some letters out and adding a few new ones. At the end we still had to include 100 ornaments, pen flourishes, index characters, etc. Index characters are usually black hands, but Zapfino has ladies' hands as pointers. This is not a concession to women's lib on my part. I think I used such symbols for the first time ever in Zapf Dingbats which I designed for the International Typeface Corporation in New York in 1973.

»The film »The Art of Hermann Zapf«

And now a few notes about my experience in the movie business. The film »The Art of Hermann Zapf« was produced in 1967 at Hallmark Cards Inc. in Kansas City, Missouri and in my design studio in Dreieichenhain, Germany. There was also a German version made by Linotype with the title »Die Welt der Buchstaben«. For several years this has also been the name of my permanent exhibition at the Herzog August Bibliothek in Wolfenbüttel, a beautiful old library, famous for their manuscripts and books. It was Hallmark's idea to make an educational film which could be lent to art schools and TV stations. The beginning of this interesting project was very difficult. I was not at all familiar with the Hollywood English of the movie people, so I had to learn that first.

Our cameraman, Frank Robinson, came from Hawaii. He was used to big outdoor scenes with professional models. In his Polynesian accent he only

The production of the film in Kansas City/Missouri

spoke about shooting and takes in connection with my story board, of stills he wanted to include etc., demonstrating his ideas with sweeping gestures.

My God, very quickly I realized we had absolutely different conceptions about the film. I wanted no outdoor shootings at all, no expensive movie stars. I only wanted to show single letters, my paw manipulating a broad-edged pen, and for the letterforms, close-ups to explain the movement of the pen. In addition, I wanted special close-ups through a glass on which I would write. Turning the film during copying will make it look like as though I was writing on air. At once my friends at Hallmark had a new term for this: frog views. How could I tell my thoughts to a wild man from the film business? But the frog view idea persuaded him and suddenly he said: Great, Hermann, let's start tomorrow.

I would like to add just one more detail of the making of the film. After long discussions and the help of a lot of alcohol we started late in the night. I was sitting at a slanted glass table with a hot spotlight in my neck. Frank Robinson was lying on the floor with the camera ready for a frog-view shot. My task was to write beautiful letters with ink which dried as soon the pen touched the slippery surface of an astralon sheet. Not an easy job at all with a nervous cameraman at your feet. But with whiskey and many words of praise at the end, we all finished the film. It was a painful experience and I swore never to burn my fingers as a pseudo Hollywood production manager again, but to stay with my humble pen and design alphabets.