ADRIAN FRUTIGER

SWISS FOUNDATION TYPE AND TYPOGRAPHY

TYPE FACES. THE

EDITORS · HEIDRUN OSTERER & PHILIPP STAMM

COMPLETE WORKS

BIRKHÄUSER

Adrian Frutiger – Typefaces. The Complete Works

ADRIAN FRUTIGER
THE

TYPEFACES.
COMPLETE WORKS

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Content

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Adrian Frutiger – The standard-setter

With Gutenberg's invention of the adjustable hand mould, no less was achieved than the industrial-scale production of a commodity – metal type – in any desired quantity and with consistent quality, effectively ushering in the modern era. Master scribes were replaced by master printers. This invention would last half a millennium before it, in turn, was pushed aside by photosetting, by information being transmitted at the speed of light. The end result, however, was still a printed letter on a page. Unfortunately a correspondingly fast improvement in human comprehension has not been forthcoming. The composition of our brains is basically unchanged since the time of Adam & Eve. An a is an a, and always will be.

At the threshold of this new era in printing technology, one name stood out: Adrian Frutiger. The measurer and standard-setter of all things typographic. In his 1951 diploma submission, Adrian Frutiger produced nine wooden panels on which he had engraved, letter by letter, examples of Western alphabets – from Greek inscriptional capitals to humanistic minuscules and cursives. It was already apparent in this work that he was a master of space, proportion and order. It was clear even then that his career path would be characterised by his passion for the criteria of legibility and the beauty of form. During his time in France, typefaces such as *Méridien, Serifa, Iridium* and *Linotype Centennial* were produced, typefaces that captured the zeitgeist, and which are still proving their worth today.

Around the middle of the last century work began on the production of a typeface family with the name *Univers.* A system ordered and classified into 21 members was a totally new approach at the time. These 21 members would find their application in every area of use: from gracing posters to appearing on the smallest packaging leaflet. The first step in the generation of every printed product developed by a highly specialised profession is the choice of a typeface and its design. As much for movable type as for photosetting and the compositor, this typeface is still the lynchpin at the end of those 500 years. It represents both the end of an era and the beginning of a new one. If survival down the ages is an important criterion for art, then this is also true for the art of typography. And it is all the more true for a typographic art that neither displays nor has need of modish showiness.

With Adrian Frutiger there has always been a seamless transition between applied and fine art. The glyphs of his Indian typeface and of his logotypes have also been applied in his sculptures, reliefs and woodcuts in a free and unique manner. They spring from the same sense of form and strength of expression as his applied art. Everything that takes and assumes shape in his works has been filtered through his depth of knowledge and his power of thought. However, Adrian Frutiger has always remained a great, yet modest man, a man who, in his dedication to his work in the service of type and the word, and in his ceaseless invention in the form and material of his fine art works has been, and will remain, a standard-setter.

Adrian Frutiger
A typeface is a tool

Working with hot metal was my first experience of the power of type to make the whole world of thought legible simply by re-arranging the same letters over and over again. This made it clear to me that optimum readability should always be foremost when developing a typeface. But then we found ourselves in an era in which type was no longer set using lead characters, but with beams of light. Transforming the typefaces of the old masters from the old to the new process was the best learning experience for me. But when it came to the grotesques, I had an idea of my own. And from that idea arose the *Univers* family. Technical progress took a great leap forward. Moving typefaces to electronic representation brought with it the jaggies and later the vectorisation of the outlines. Given my sense of form, it was quite a painful experience. Now, though, with font creation programmes and their resolution-independent Bézier curves, and with lasersetting, it looks to me like our journey through the desert is finally over.

Other tasks fell to me. *OCR-B* set me the problem of designing characters that were readable not only to the human eye, but also to mechanical ones – something that stirred up, shall we say, an aesthetic conflict that taught me how to think about things in a different way. With the signage concepts for the airports and the Paris Métro I worked on large-scale typefaces. That's how I came to realise that, in all sizes, readability follows the same rules about counters and side bearings. When I was asked to think about the Indian typefaces, this uncharted territory amazed me. Only when I began to write and draw the characters, did I become aware of the deep-seated connections between the Indo-European cultures. It took only a short time for me to grasp that my task consisted of imparting 500 years of Western experience in setting and printing technology. My Indian colleagues would have to find their own way forward from there.

The evolution of these letters – this continual simplification from symbol to sound – is something that has always preoccupied me. I was always fascinated by the symbol as the expression of a signature, a brand, and above all, a cipher. This connection between letters and symbols brought me into the commercial world of the logo as an area of operation. In the course of my working life I built up knowledge and skill. To impart those achievements and experiences to the next generation became the most important thing. In May 1968 the intellectual climate changed. In their impetuousness, the students pushed their craft to one side and tried to solve problems simply by force of intellect. I could never express myself only through words, without using my hands and the tools of my trade. So I have chronicled my legacy in my books, through my writing and my drawing.

On my career path I learned to understand that beauty and readability – and up to a certain point, banality – are close bedfellows: the best typeface is the one that impinges least on the reader's consciousness, becoming the sole tool that communicates the meaning of the writer to the understanding of the reader.

from *Adrian Frutiger. Denken und Schaffen einer Typographie*

The book that you are holding is the result of many conversations between myself and friends from the profession, conducted over a period of two years at my studio in Bremgarten near Bern. Erich Alb, Rudolf Barmettler and Philipp Stamm used their subtle but – at the same time – direct questioning and discussing to awake in me memories that, for years, had been deeply buried. For that I am grateful to them. We met once a month, and talked about my typeface design work in chronological order. It was almost like living my professional life all over again, beginning with the school in Zurich, through my time at Deberny & Peignot and then on to Linotype.

Without the discussions between specialists, my friends in the profession, and other advisors, this book would never have happened. My thanks go to Heidrun Osterer, Philipp Stamm, my above-mentioned colleagues, and to Silvia Werfel, who transformed the transcripts into proper German.

Introduction
How we made this book

This book is the product of a series of factors and happy coincidences. In 1999 Erich Alb, publisher of Syndor Press approached us to carry out the design of a book about the typographical work of Adrian Frutiger. We gladly agreed, little realising what the project would become – a task that would define our working lives for the next decade.

The project began in 1994, at a dinner held to celebrate a Linotype typeface competition, during the course of which Friedrich Friedl suggested during a conversation with Adrian Frutiger that he write his professional memoirs. Frutiger rose to the challenge and Syndor Press, publishers of Frutiger's books between 1996 and 2001, undertook the planning of a multi-volume edition. The first volume, which dealt with Frutiger's fine art works, appeared in 1998 under the title *Forms and Counterforms.* The content of the second volume, containing his typographical works, had burgeoned so much that we were brought in as designers in 1999.

During the development of the design concept we were faced with many questions regarding content, simply because our involvement in Adrian Frutiger's typeface creation runs so deep. Between 2001 and 2003, in a series of intensive discussions with Adrian Frutiger, Erich Alb, Rudolf Barmettler and Philipp Stamm analysed and examined the origins and development of each of his typefaces. These conversations were recorded on tape. In 2001 we undertook a month-long research journey through France, England and Germany, to gather as much material as possible from libraries, museums and antiquarian booksellers, as well as from public and private collections. We also sought out people who had worked with Adrian Frutiger or who were still in contact with him, and during the course of some long and wide-ranging interviews we deepened our knowledge of Adrian Frutiger's life's work.

In our discussions with Erich Alb we tried to exert a little more influence over the book's concept. This wasn't always successful, but the project was making progress – until the moment at the end of 2001 when Syndor Press was forced into liquidation. At that time we were already far more familiar with the deeper material, and after securing Erich Alb and Adrian Frutiger's agreement, decided to carry the project forward ourselves, becoming the book's authors as well as its designers.

The collected documents pertaining to Adrian Frutiger's work were transferred from Syndor Press in Cham to our offices in Basel, so that we would always have the originals at our disposal for consultation and reproduction. In order to get an overview of the material and to see how we were going to organise the chapters in the book, we began to form an archive of all the documents from Adrian Frutiger, as well as those that we had collected on our travels. The question was, of course, what would ultimately become of all this material? And so, starting in October 2002, during many meetings over the course of two years, a group of six people prepared the establishment of Swiss Foundation Type and Typography, whose founding member was to be Adrian Frutiger.

The work on the book continued in parallel. We started, basically, at the beginning, throwing out a lot of original concepts, and completely reworking the ideas for the design and contents. Only the size format of the first volume of the originally planned series was retained. We presented our ideas to Adrian Frutiger, Erich Alb and Rudolf Barmettler. The reaction was very positive, and, above all, Adrian Frutiger was grateful that his typographical work would be so comprehensively documented.

The setting up of the Foundation was yet under way, and took up a lot of time and energy, so much so that the book was pushed somewhat into the background. But further research travels and interviews were also being conducted that enabled us to answer questions that were becoming ever more exacting and searching. The Linotype company opened up its archive and entrusted us with the remaining original design drawings of Adrian Frutiger's typefaces for Swiss Foundation Type and Typography. We undertook research into type design and history and re-appraised the material we had on hand. We had Adrian Frutiger's hot metal typefaces recast at Rainer Gerstenberg's in Darmstadt,

then set them as alphabets at a hand compositor's in Basel and printed them on barite paper. Our colleagues scanned in these typefaces and, over many hours, prepared them for the examples in the book. New typefaces by Adrian Frutiger for Linotype necessitated an ongoing enlargement of the book's scope. We also needed to find a publisher for the book and draw up a contract. And still the questions rolled in, and the discussions continued. There were many delays, and many clarifications were necessary – including the question of who was actually now the author of the book.

The transcriptions of the interviews were edited by us before being sent to Silvia Werfel, a specialist journalist, who took Adrian Frutiger's words and translated them into flowing prose. In summer 2007, the publishing contract with Birkhäuser was finally signed, and we began to compose the ancillary texts that would frame Adrian Frutiger's typefaces against a background of typographic history and contemporary typographic design. As Silvia Werfel's texts came in, we gave them the finishing touches. At this point, with the solid support of our co-workers, the available material for the chapters had already been sounded out, sorted, and built into the layout.

That the project has come to a successful conclusion with the book you are now holding is due to many people. First and foremost, we must thank the extreme patience and good will of Adrian Frutiger, who read every chapter and gave his input on each of them. Furthermore, we would like to thank the Foundation, which backed us financially; Linotype, in whose company archives we were allowed to research at any time without hindrance; Silvia Werfel, who captured the nuances of Adrian Frutiger's speech, and whose transcripts provided an excellent foundation for the chapters; Erich Alb and Bruno Pfäffli, who scrupulously proofread the book using two very different approaches; the translators and proofreaders of the English and French editions, in particular Paul Shaw, who read the chapters in the already translated English version with a critical and scholarly eye – and who made small improvements here and there; Birkhäuser Verlag, for their appreciation and support of our work; and, naturally, our colleagues and co-workers, who, in spite of little compensation, have given us their committed support, and who transformed our ideas and supplemented them with their own. And let us not forget the worldwide support – be it moral or in the form of further information and documents – that we have encountered everywhere, and which gave us the strength to bring together the three available language editions of this work. It was planned to be published in time for Adrian Frutiger's 80th birthday in the spring of 2008 – but at least we managed it by autumn of the same year.

Basel, July 2008 – Heidrun Osterer and Philipp Stamm

With the second edition, we have striven to make improvements. Mistakes that were identified and about which we have been informed (for which our sincerest thanks) have been corrected. An essential improvement in relation to the first edition is the index. Wherever possible, we have updated material; now, for example, the digital version of *Phoebus* is shown in its complete form. Time constraints made it impossible to discuss the additional fonts that have meanwhile been published by Linotype (all of them reworked versions of earlier typefaces by Adrian Frutiger); they are however listed in the individual chapters and in an appendix.

Basel, January 2014 – Heidrun Osterer and Philipp Stamm

Introduction
How to use this book

Book structure
This book is divided into three sections: typeface chapters, explanations of typesetting technologies, and pages dedicated to logos. They have been ordered chronologically. In order to follow the development of Adrian Frutiger s type designs clearly, the typeface chapter sequence is based on the year of the design of the typeface, not of its publication or production; in many cases the dates are very widely separated. Since the designs are seldom dated, and the correspondence does not always provide the relevant information, in some cases the sequence cannot be definitively verified. In addition, many typefaces were developed in parallel.

Typeface chapter structure
The structure within the chapters themselves is largely chronological, from the conception of a typeface through to its development, publishing and marketing. For the analysis at the end of every chapter (sample text, typeface dimensions, typeface comparison, height comparison), the digital version of the typeface was used, since it contains the character sets of every available weight.

Chapter titles
Lowercase letters are not available in every one of Adrian Frutiger s typefaces. To maintain visual cohesion throughout the book all chapter titles were set in capitals.

Column titles
Adrian Frutiger s typefaces are classified as book typefaces, jobbing typefaces, signage typefaces, corporate typefaces and type-design projects. This classification can be found next to the page number. Additionally, logos, wordmarks and typeface production are similarly annotated.

Explanations of typesetting technologies
Adrian Frutiger developed many of his typefaces in light of the then-current typesetting technologies, beginning with *Egyptienne F* through to *OCR-B* and to *Frutiger Neonscript.* So that readers who are not overly familiar with the technology may better understand the reasons behind a particular typeface design, the most important typesetting technologies have been given short descriptions in this book. Each technique is introduced before the typeface chapter where it is first used.

Logos and wordmarks
The myriad logos and wordmarks produced by Adrian Frutiger and his co-workers are extremely hard to date. Often the companies are no longer in business, or they do not keep an archive or record of such things. Often it is simply not possible to find out for whom a particular logo was designed, and whether it was indeed ever used. For this reason the logos are gathered together in unequal time periods on a single page. The arrangement and descriptions are as precise as the available information allows.

Wide text columns
These contain Adrian Frutiger s own words from the conversations with Erich Alb, Rudolf Barmettler and Philipp Stamm. The authors have checked the accuracy of the names, dates and other facts as far as possible, and have also expanded the information where necessary. Additionally, where necessary, the text has been supplemented with quotations by Frutiger from other sources.
The first-person text has been set in *Egyptienne F.* By doing this, this typeface – which had fallen somewhat out of fashion when it was chosen in 2002 – should reach a new audience. Indeed, in the last few years it has become a popular body text for magazines in Switzerland.

Narrow text columns
The text in these columns is set in the sober, geometric *Avenir.* Written by the authors, it illuminates the further interrelation of Adrian Frutiger s type design work with reference to context, creation and use as well as each typeface s historical basis and technology.

Character set comparison
Each chapter contains a comparison of the character set in the original setting technology and in the digital font.

Sample text
As an illustration of the text image, each typeface available in digital form is given a page with trilingual sample text in various point sizes. The sizes are adjusted from chapter to chapter for optical consistency. The kerning and leading are harmonised with each other. The respective details are found underneath the sample text.

Typeface measured analysis
For typefaces with several weights, the proportions of height to width of the normal face are given as well as for the bold fonts and the oblique. For the calculation of the proportions a fixed cap height of 10 cm was chosen. The letter proportions of H n o were measured, along with the weight of vertical and horizontal strokes.

Typeface comparison
This compares Adrian Frutiger s typeface with two other similar typefaces from different designers. The choice of comparison typefaces was made according to similarities in character and form, as well as the year of creation. The printing typeface classification plays only a subsidiary role. Using the chosen characters, the differences between Adrian Frutiger s typefaces and the others are demonstrated.

Height comparison
In the more comprehensive chapters the typeface comparison is supplemented by a height comparison. For the measurement of typeface height (red figures), a cap height of 1 cm was used. Additionally, the proportional relationship of ascenders and descenders to the x-height is given (black figures).

Adrian Frutiger's teachers and mentors

Starting out

Adrian Frutiger was born on 24 May 1928 in Unterseen near Interlaken in Switzerland. He grew up as the second-youngest child, with his sister Charlotte and his brothers Roland and Erich. His mother, Johanna, a baker's daughter, raised the children and ran the household. His father Johann, son of a carpenter, was at this time employed in a draper's in Unterseen.[1] The village itself is cut off from Interlaken by the river Aare, and lies on the valley floor between Lake Brienz in the east and Lake Thun in the west. Towards the south stands the imposing mountain panorama of the Berner Alps, with the Eiger, Mönch and Jungfrau peaks; towards the north the foothills of the Alps proper dominate the horizon. The wider world seems distant, yet the proximity of fashionable Interlaken means it is never far away. In 1934 Adrian Frutiger's father opened a handloom workshop there, the Oberländer Webstube, whereupon the family moved to the health resort. Their house stood directly by the train tracks. To the rear could be seen a gasworks with its coal silos and loading cranes, and a little further away, the base station of a mountain cable car could be seen. Adrian Frutiger liked to look at this scenery through the window. With hindsight he has stated that this daily contact with all things mechanical – his passion for model traction engines and the interest in electricity that this awoke in him from an early age – proved to be a natural education. Even the simple Jacquard loom that his father acquired aroused his interest. This machine allowed semi-automatic weaving and, with the help of homemade punch cards, they were able to produce versions of the weaving samples that his father had collected over the years with a much finer warp and weft. Under its later name of Frutiger Heimtextil, the shop continued to be run by Frutiger's younger brother Erich until 2006. In the mid 1980s Adrian Frutiger designed the logo for the family company **/01/**, one of almost 100 logos and wordmarks he made during his career.

Frutiger's education began in 1935. His first years in school did little to fire his enthusiasm. Adolescence, however, brought about a great transformation: he discovered the joys of reading, drawing and painting. The children's books of Ernst Eberhard, with their hand-drawn ink illustrations, especially captivated him. One of these stories centred on a boy who inherited a great deal of money through his willingness to help other people. This legacy enabled the boy to attend the Kunstgewerbeschule (School of Applied Arts) in Bern, and the story ended with the boy continuing his studies in far-off Italy. This story captured Adrian Frutiger's imagination so strongly that he wrote to Ernst Eberhard, who lived in Unterseen and worked as a secondary school teacher. The reply he received, with its invitation to visit, was written in a beautiful script that Adrian Frutiger started immediately to imitate. Eberhard advised him to observe more closely while drawing from nature. Through yearly visits to Eberhard, Adrian Frutiger's drawings received critical dissection. This father figure became his first mentor. In 1948, while Frutiger was working on his *Die Kirchen am Thunersee*, a deep friendship also developed with his former primary school teacher Franz Knuchel and his wife Leny. Inspired by them, he started reading classic literature. The works of Herman Hesse, particularly *Steppenwolf, Narcissus and Goldmund* and *The Glass Bead Game,* left a lasting impression on him. Even as a youth, Frutiger already displayed a desire to travel further and wider, although home still remained important to him. After living in Paris for nearly 20 years, he still gladly designed the dust jacket for the *Jahrbuch vom Thuner- und Brienzersee 1971*[2], at the request of Franz Knuchel.

At the end of secondary school, Adrian Frutiger's interest in letterform took firm root. Something in him rebelled against the stiff up-and-down strokes of the *Hulliger Schrift* **/02/**. This style of handwriting, developed by the Basel teacher Paul Hulliger was introduced into Basel schools in 1926, and by 1936 had been adopted by ten of Switzerland's 25 cantons. It is a reworking of Ludwig Sütterlin's handwriting style that had been used in German schools since 1911. Frutiger straightened the joined, rightward-sloping script, and modelled his own rounder, more flowing hand on the writing of Ernst Eberhard **/03/**.

At the age of 15, Adrian Frutiger decided on his career path, but his father was firmly set against the profession of a 'starving painter'. There was also no money available for a

/01/
Logo for Frutiger Heimtextil, designed around 1985 for the family weaving and cloth business in Interlaken.
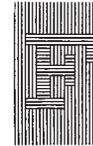
/02/
At secondary school Frutiger learnt the Hulliger Schrift *handwriting system, which was introduced in 1926 by the Basel schoolteacher Paul Hulliger.*

/03/
Adrian Frutiger's handwriting at age 13 (top) and 15 (bottom) – it became more upright, more rounded and more fluid.

/04/
Die Kirchen am Thunersee –
cover and double-page spread from
Adrian Frutiger's final submission
for his diploma in typesetting, 1948.

Die Kirche von Leißigen

Wenn wir nun die einzelnen Gotteshäuser am Thunersee kurz betrachten wollen, so ist es wohl am nützlichsten, wenn wir sie ihrer geographischen Reihenfolge nach besuchen.

Am obern Ende des Thunersees, dem Morgenberghorn zu Füßen, liegt das schmucke Dörflein Leißigen. Mitten aus seinen Dächern und Baumkronen hervor erhebt sich der stattliche Turm einer in vortrefflichem Stile erbauten Kirche. In ihrer einfachen und gefälligen Form diente sie seinerzeit als Vorbild für die Kirchen der Schweizerdörfer an der Landesausstellung in Genf 1896 und an der Weltausstellung in Paris 1900.

Die Kirche von Leißigen zählt zu den ältesten im Bereiche des Thunersees. Wohl ist der heutige Bau erst im Jahre 1675 entstanden, aber er wird, wenn nicht in den Ausmaßen, so doch in seiner Form dem alten Vorbild nachgebaut worden sein. Die Geschichte dieses Gotteshauses und seines Kirchensatzes reicht bis zurück in das 10. Jahrhundert. Sie soll 933 von König Rudolf II. von Burgund und seiner Gemahlin, der frommen Bertha von Alemannien, gestiftet worden sein als eine der zwölf Tochterkirchen von Einigen, deren gemeinsame Geschichte wir später betrachten werden.

Den ersten Besitzer dieses Kirchensatzes finden wir urkundlich im Jahre 1289 unter dem Namen Heinrich von Strättligen; dieser verschenkte ihn 1312 dem Kloster Interlaken. In den Dokumenten-Büchern von Interlaken lesen wir Folgendes über diese Schenkung: „Johann, Heinrich und Ulrich von Strättligen, Herren zu Spiez, als wahre Patrone der Kirche zu Leußingen, übergeben das Patronatsrecht dieses Kirchensatzes, um Gotteswillen und zu ihrem und aller Vorfahren

12
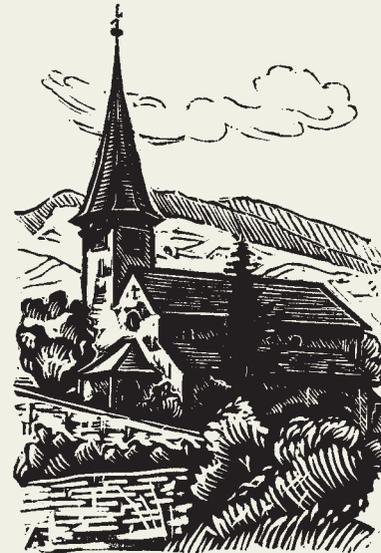
Schloßkirche Spiez

DIE
KIRCHEN
AM
THUNER
SEE

scholarship. The then-current economic uncertainty was surely at the forefront of his father's mind when he told his son, "first you learn a trade, then you can do what you want."[3] Adrian Frutiger had been supplementing his pocket money running errands for the Confiserie Deuschle in Interlaken, so it seemed an obvious choice to ask the owner for an apprenticeship. However, Eberhard persuaded him to take up a more artistic profession. Frutiger applied to Ernst Jordi, a friend of Eberhard, and head of the Otto Schlaefli Buch- und Kunstdruckerei AG (a book and fine art printer) in Interlaken. The printer already had taken another apprentice for typesetting, but made an exception and took him as well. It shows a certain normality, that in neutral Switzerland in the middle of the Second World War, a 15-year-old could decide against an already set apprenticeship as a pastry maker. Adrian Frutiger accepted readily, but once again he met with opposition from his father, who thought that all members of the printing trades belonged to the ranks of 'the socialists'.

During the four-year typesetting apprenticeship from 1944 to 1948 Adrian Frutiger visited the Gewerbeschule in Bern. On the recommendation of the school's governing body, the Otto Schlaefli Buch- und Kunstdruckerei AG agreed to grant him an additional day a week at the school to study drawing and woodcuts. Adrian Frutiger stood out, "due to his conscientious approach to work, his remarkable creative faculties and his extraordinary initiative."[4] His typography teacher was Walter Zerbe, already well known for his book *Satztechnik und Gestaltung* /05/, written with Leo Davidshofer. Published in 1945 by the Bildungsverband Schweizerischer Buchdrucker (The Swiss Book Printers' Educational Association),[5] it was for many years the foremost Swiss textbook on typesetting.

During his apprenticeship Adrian Frutiger had already produced two publications. In the fourth year he produced *Die Rede des jungen Hediger*.[6] In the spring of 1948, at the Gewerbeschule, he presented as his final submission for his typesetting apprenticeship *Die Kirchen am Thunersee* /04/. Ernst Jordi, head of the printing company wrote the introduction: "This little work before you must be judged, first and foremost, as an independent creation in words and pictures – his journeyman's piece, as it were – of our young friend and colleague, Adrian Frutiger. On his journeys and walks, he has turned time and again to the homely, yet most beautiful building our small corner of the world, the churches on Lake Thun. With much love and dedication he has drawn it, made woodcuts of it, and then immersed himself in its history. It fills us with joy and pride to be present at the birth of this small volume, and to have been able to lend a hand in its printing. We express the hope that with it, this young craftsman will have taken a first step, upon which he can further build, gradually to take his place in the realm of the arts. That he succeeds in this, I wish him with all my heart. God bless Art!"[7] The book was handset in Rudolf and Paul Koch's blackletter typeface *Claudius*.[8] Accompanied by Adrian Frutiger's 12 woodcuts, it was printed in a run of 1000 copies, 25 of which were bibliophile editions, linen-bound, individually numbered and coloured by hand. Additionally Adrian Frutiger also added the book's title in calligraphy by hand.[9] He received his initial instruction in writing with the broad-nib pen from Werner Wälchli, who was active as a typesetter in the same company.

After the successful conclusion of his typesetting apprenticeship Adrian Frutiger took up a six-month position as a hand compositor at the well known printing plant Gebr. Fretz AG in Zurich. However, his goal was still entry into the Kunstgewerbeschule in Zurich.

Enrichment

Shortly before his 21st birthday in early 1949, Adrian Frutiger began his further education. After Max B. Kämpf,[10] Frutiger was the second student at the Kunstgewerbeschule in Zurich who wanted to study type design. (Another, earlier Zurich student who went on to become a type designer had been Hans Eduard Meier, whose *Syntax Antiqua* was issued in 1968.) During the week, Frutiger attended various type design courses given by Alfred Willimann. After a short time, he asked that his timetable be changed to enable him to attend Walter Käch's courses for lettering as well. In addition he attended classes in other specialist

/05/
Textbook for typesetters from 1945, co-authored by Walter Zerbe, Adrian Frutiger's teacher at the Gewerbeschule in Bern.

/06/
*Willow branch, designed by Adrian Frutiger in 1949 in the style of Chinese and Japanese woodcuts.*

/07/
Inscriptional capitals, carved in stone in 1949 by Adrian Frutiger during his further education as a type designer in Zurich.

/08/

*Nicolas Jenson's roman typeface
from 1470 – the balance of
the text image was an example for
Adrian Frutiger.*

qui omnibus ui aquarum ſubmerſis cum filiis ſuis ſimul ac nuribus
mirabili quodã modo quaſi ſemen huãni generis conſeruatus eſt:quẽ
utinã quaſi uiuam quandam imaginem imitari nobis contingat:& hi
quidem ante diluuium fuerunt:poſt diluuium autem alii quorũ unus
altiſſimi dei ſacerdos iuſtitiæ ac pietatis miraculo rex iuſtus lingua he
bræorũ appellatus eſt:apud quos nec circunciſionis nec moſaicæ legis
ulla mentio erat . Quare nec iudæos(poſteris enī hoc nomen fuit)neqʒ
gentiles:quoniam non ut gentes pluralitatem deorum inducebant ſed
hebræos proprie noïamus aut ab Hebere ut dictũ eſt:aut qa id nomen
tranſitiuos ſignificat.Soli qppe a creaturis naturali rõne & lege ïnata
nõ ſcripta ad cognitioné ueri dei trãſiere:& uoluptate corporis cõtépta
ad rectam uitam pueniſſe ſcribunť:cum quibus omibus præclarus ille
totius generis origo Habraam numerãdus eſt:cui ſcriptura mirabilem
iuſtitiã quã non a moſaica lege(ſeptima eïm poſt Habraã generatione
Moyſes naſcitur)ſed naturali fuit ratione conſecutus ſũma cum laude
atteſtatur.Credidit enim Habraam deo & reputatũ eſt ei in iuſtitiam.
Quare multarum quoqʒ gentium patrem diuina oracula futurũ:ac in
ipſo benedicédas oés gentes hoc uidelic& ipſum quod iam nos uideũs
aperte prædictum eſt:cuius ille iuſtitiæ perfectioém non moſaica lege
ſed fide cõſecutus eſt:qui poſt multas dei uiſiones legittimum genuit
filium:quem primum omnium diuino pſuaſus oraculo circũcidit:&
cæteris qui ab eo naſcerétur tradidit:uel ad manifeſtum multitudinis
eorum futuræ ſignum:uel ut hoc quaſi paternæ uirtutis ïſigne filii re
tinétes maiores ſuos imitari conareť:aut qbuſcũqʒ aliis de cauſis.Non
enim id ſcrutãdum nobis modo eſt.Poſt Habraam filius eius Iſaac in
pietate ſucceſſit:fœlice hac hæreditate a parétibus accæpta:q uni uxori
coniunctus quum geminos genuiſſet caſtitatis amore ab uxore poſtea
dicitur abſtinuiſſe.Ab iſto natus é Iacob qui ppter cumulatũ uirtutis
prouétum Iſrael etiam appellatus eſt duobus noïbus ppter duplicem
uirtutis uſũ.Iacob eïm athletã & exercétem ſe latine dicere poſſumus:
quam appellatioé primũ habuit:quũ practicis operatioïbus multos
pro pietate labores ferebat.Quum auté iam uictor luctando euaſit:&
ſpeculationis fruebať bonis:tũc Iſraelem ipſe deus appellauit æterna
premia beatitudinéqʒ ultimam quæ in uiſione dei conſiſtit ei largiens:
hominem enim qui deum uideat Iſrael nomen ſignificat. Ab hoc.xii.
iudæorum tribus pfectæ ſũt.Innumerabilia de uita iſtorum uirorum
fortitudine prudentia pietateqʒ dici poſſunt:quorum alia ſecundum
ſcripturæ uerba hiſtorice conſiderantur:alia tropologice ac allegorice
interpretať:de qbus multi cõſcripſerũt:& nos in libro qué inſcripſiũs

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areas, like still life, life and perspective drawing. But he was most drawn to Karl Schmid's botanical drawings and woodcuts **/06/**. In autumn 1949, Frutiger began engraving inscriptional capitals in smoothly worn pebbles from the river Sihl **/07/**.

Adrian Frutiger's calligraphy teacher, Alfred Willimann, was a sculptor, graphic artist and typographical designer who had been lecturer for drawing and lettering at the Kunstgewerbeschule in Zurich since 1930. He was also deeply involved in the well known photography class given by Hans Finsler.[11] Willimann was self-taught in several fields. Due to financial and familial constraints he could only complete one year at the Kunstgewerbeschule in Zurich. In his notes Adrian Frutiger wrote: "When I presented Alfred Willimann with my little book about the churches, he greeted me with a good-natured smile and said something like: 'you really are from the old typesetters' guild, and are spoiling it already for the artists'. He ignored me for some weeks after that … I followed him anyway to all four preparation classes in letterform, each course four hours per week and obligatory. I listened to him, and looked over his shoulder when he was explaining calligraphy to the others at their desks. I was astounded at this glimpse into a new world of understanding lettering, so very different from what I had learned as a compositor at the Gewerbeschule. My first weeks in Zurich were like being in a maze. Everything that I had learned as a compositor and woodcut artist seemed so squalid and naïve, parochial and, well, a bit kitschy. My first encounter with Willimann had left my youthful pride in my work severely dented; I only realised later that he did it on purpose, to give me a wake up call, to get me fired up from the very start."[12] Alfred Willimann's teaching built on the history of lettering, which he illustrated with examples. He drew the historic scripts with a piece of chalk held flat against the board, imitating a broad-nib pen and then explained the pen grip, the drawing of the stroke and the rhythm of the various script examples. For him calligraphy meant a sort of two-dimensional architecture, as Frutiger once described it. For Alfred Willimann the essence of calligraphy was not building up the black, but rather covering the white, so that the light of the white page remains alive. That light, that white from the counters and side bearings, would, in time, become an important aspect of Adrian Frutiger's entire work as a type designer. Under Willimann's teaching he also learned to understand the quality of the downstrokes. So that these contain tension and life, pressure must be applied at both the beginning and end of the stroke, without the stroke ends becoming flat. **/12/**. The result of this waisted stroke can also be found in some of Adrian Frutiger's type designs.

In contrast to Alfred Willimann, Walter Käch **/13/** graduated from a course of several years study in graphic design at the Kunstgewerbeschule in Zurich after completion of an apprenticeship as a lithograph. Towards the end of his studies in 1920, three of the greatest European personalities, who brought about the definitive upheaval in typographic teaching and education at the beginning of the 20th century, were lecturing in Zurich. It was a singular stroke of luck for Walter Käch that Fritz Helmut Ehmcke, Rudolf von Larisch and Anna Simons were in Zurich for one year. Thanks to Anna Simons, a former student of Edward Johnston, Johnston's seminal 1906 work, *Writing and Illuminating and Lettering*,[13] was available in German after 1910. Anna Simons' translation was titled *Schreibschrift, Zierschrift & angewandte Schrift*.[14] The Austrian Rudolf von Larisch was also responsible for many books on calligraphy and lettering, amongst them the standard work *Unterricht in ornamentaler Schrift*[15] first published in 1905. The title emphasises Larisch's basic approach to writing: understanding letters as a medium for graphic expression. Edward Johnston and Anna Simons put more emphasis on the role of readability in calligraphy. The graphic artist and type designer Fritz Helmut Ehmcke, from Germany like Anna Simons, was well known as an author of books on lettering. One of them was *Ziele des Schriftunterrichts,*[16] published in 1911. At the end of the 1921 academic year, Walter Käch accompanied Ehmcke to the Kunstgewerbeschule in Munich, and stayed there for a year as his assistant. From 1925 to 1929 Walter Käch lectured graphic design and woodcarving in the crafts-department of the trade school in Zurich. After a break he lectured from 1940 to 1967 on
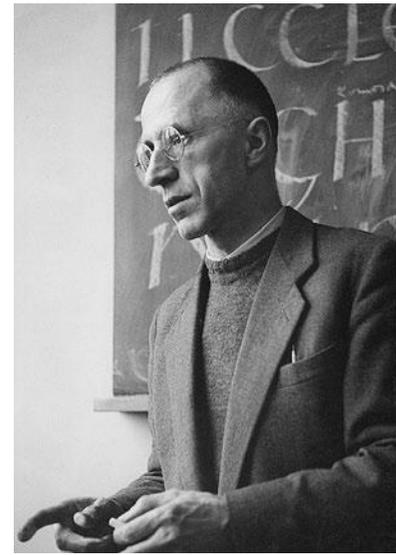
/09/
Alfred Willimann, Adrian Frutiger's teacher in the history of lettering and practice of calligraphy at the Kunstgewerbeschule in Zurich.

/10/
Wordmarks by Alfred Willimann for the carpenter and joiner Karl Steiner (top), for Lignoplast (middle) and for the paint manufacturer Gromalto (bottom).
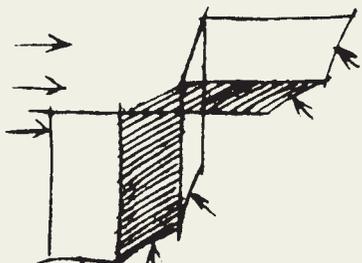

/11/
Poster title by Alfred Willimann for a 1953 exhibition on Roman portrait sculpture at the Kunsthaus Zurich, designed using inscriptional capitals.

Instructions for correct lettering by Alfred Willimann, from his lettering course at the Kunstgewerbeschule in Zurich.

type and lettering at the Kunstgewerbeschule in Zurich.[17] He subsequently published two standard works on type design: in 1949, as Frutiger's further education was beginning, the ring-bound *Schriften Lettering Écritures* /17/, and in 1956, *Rhythmus und Proportion in der Schrift / Rhythm and Proportion in Lettering* /14/.[18]

Walter Käch divided the text sections of his first book into chapters on written script and drawn script. For the drawn scripts he demonstrated the tracing of the outlines of a script using illustrated examples. Using Roman Imperial capitals as a model, he contrasted correctly and incorrectly drawn sans serif capitals /16/. Adrian Frutiger adopted many of the form-giving principles described in the book. They were instrumental in shaping his canonical forms. He also fell back on his teacher's knowledge and insight when it came to the optical rules governing his letter shapes, refining them gradually, and culminating in 1953's *Univers*. However, Adrian Frutiger and Walter Käch did not always see eye to eye. "One thing that always stirred up confrontation was the concept of rhythm in a line of text. Referring to an enlargement of Nicolas Jenson's roman, I tried to demonstrate that the counters and side bearings were of equal weight," Frutiger later said. "It seemed to me that Jenson, like Gutenberg, had adopted a grid system as a framework. Käch didn't agree. He taught that the side bearings should be kept narrower, which is certainly valid for sign-writing. My thoughts, however, lay in the direction of typefaces for reading. I later drew all my serif typefaces according to this concept, to avoid irregularity in the text flow."[19] Frutiger's appreciation for Nicolas Jenson's roman /08/, designed in Venice in 1470, was a result of his study under Alfred Willimann. For Frutiger it was the regularity of the text image and not the individual letter shapes that is paramount. The quality lies in the interplay of form and counterform. "The letters should stand next to each other like links in a chain,"[20] he has said.

Both Willimann and Käch had a different outlook on type design, said Adrian Frutiger. Both, however, based their principles on the history of lettering. Alfred Willimann often drew his wordmarks and titles on type in a linear sans serif /10/. His historical reference point was the antique Greek and Roman inscriptional capitals from the 5th to the 2nd century BC, based on the elementary shapes of circle, square, triangle and double square /11/. Walter Käch followed a completely different path in his teaching of lettering. He used as a model the Roman uncial and half-uncial of the 4th and 5th centuries AD, the letter widths of which exhibit a unifying principle /15/. This harmonisation of the proportions can also be found in the sans serifs of the 19th century, such as *Akzidenz Grotesk.* Walter Käch defined the symmetry of a letter on a grid to be a guiding principle. Stylistically, these were static scripts with square, oval and triangle as their elementary forms. The stroke contrast in the scripts is more pronounced than in the inscriptional letters. As with the uncials – drawn with a shallow pen angle – the curves close the letter shape. The curve terminals in Käch's letters are therefore horizontally terminated /17/, which was a novelty in contrast to the majority of the grotesques that existed at the time. It is a characteristic that can also be seen in Adrian Frutiger's sans serif design /19/, drawn in 1950–51, under Käch's supervision. In 1953 at Deberny & Peignot in Paris, this design formed the basis for the *Univers* typeface concept. "In my head, I always had this idea of completeness. And that had already started forming under Käch. Käch had taught us how to think in terms of typeface families."[21] With his first grotesque, Frutiger had gone beyond Käch's ideas. He changed and considerably refined the typeface and, at Emil Ruder's suggestion, opened out the counters. With his second grotesque, *Concorde,* designed 1961–64 in conjunction with André Gürtler, the differentiated letter proportions owed more to Alfred Willimann's understanding of lettering.

Adrian Frutiger brought his further education at the Kunstgewerbeschule in Zurich to a close with his final diploma submission, which he had worked on for nearly a year. Like Max B. Kämpf he took as his subject the history of lettering, and cut 15 historical scripts, reversed out on nine wooden plates /18/. In order to get the stress of the strokes

/13/
Walter Käch, Adrian Frutiger's teacher in lettering at the Kunstgewerbeschule in Zurich, taking a rubbing of Imperial Roman capitals.
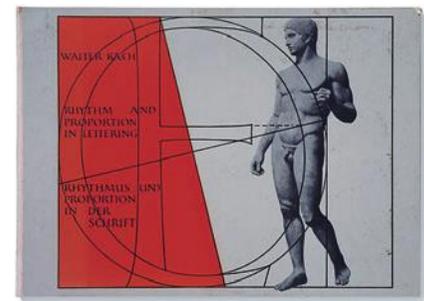

/14/
Walter Käch's 1956 textbook Rhythmus und Proportion *contained analyses of the Roman Capitalis Monumentalis.*

/15/
For Walter Käch, the uncial drawn with straight pen strokes informed his understanding of the design of sans serifs.

/16/
Instructions from Walter Käch's Schriften Lettering Écritures – *the basis for correct lettering is the Imperial Roman capitals.*
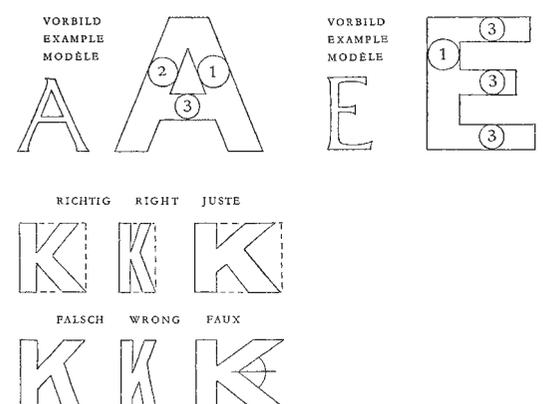
*Cover and inner pages of
Walter Käch's 1949 textbook
Schriften Lettering Écritures,
showing drawn sans serifs.*