

IN PLANTIN'S
FOOTSTEPS

EXPERT
CLASS

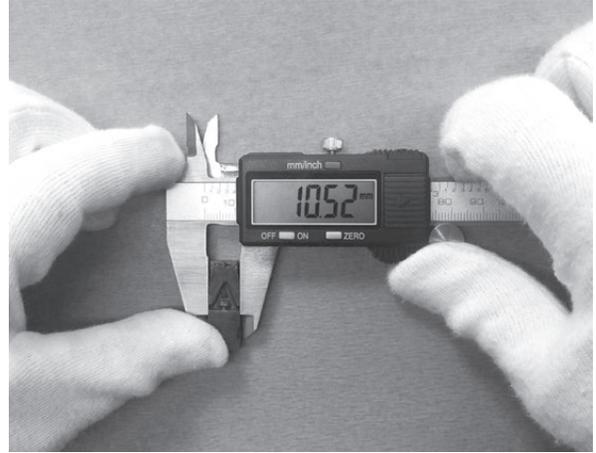
TYPE
Design

Plantin Institute *of* *Typography*



Matrices of Schöffer the younger's roman capitals kept in the Museum Plantin-Moretus.

Photos taken by the students of the course in 2015–16.



A digital Vernier ruler was used to measure each of Schöffer the younger's capitals.

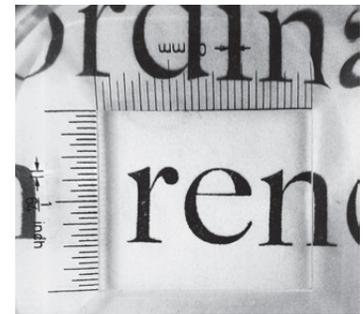


Rosart's Garamonde Romaine matrices from the archives of Museum Plantin-Moretus.

Photos taken by the students of the course in 2014–15.



Enlarged printouts with white and black marker.



Photograph made through a magnifying glass.

Learn how to design type under the roof of the Museum Plantin-Moretus in Antwerp



Dr. Frank E. Blokland.

The **Expert class Type design** of the Plantin Institute of *Typography* comprises ten daylong sessions under the roof of the illustrious **Museum Plantin-Moretus** in Antwerp, divided over a period of three quarters of a year. The purpose of the course is to facilitate research into the conventional and technical aspects involved in the production of type, and how this reflects on typography. Furthermore, the course is meant to educate students how to design type into detail, to help them to develop an in-depth insight in digital font production, and to guide them in the process of gaining control over related software.

An important aspect of the course is the exchange of knowledge and experience between the students. This interaction is especially stimulated by a **type-revival project**, on which the students have to work intensively together. This revival is always based on historical type-foundry material from the unique collection of the Museum Plantin-Moretus. Besides taking part in the revival project, each student has to design a **new typeface**, whether completely from scratch or being a revival.

The course is directed by **Dr. Frank E. Blokland**, type designer, font producer, software developer, and Senior Lecturer at the Royal Academy of Art (KABK) in The Hague.



The students of the 2017–18 course analyzed the original copper matrices (c. 1580) of the Flemish punchcutter Hendrik van den Keere. Photograph taken in the Museum Plantin-Moretus.

A B C D E F G H I K L M N O P Q R S T U V W X Y Z & A b c d e f g

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W X Y Z

Rebaño

Empêchement

The state of being unaware of what is happening around you

agudizados

Hoe gaat het met je?

mandolina

~ THE STRANGE WISTFULNESS OF USED BOOKSHOPS ~

Tournesol

Tavernier-revival by Paula Mastrangelo (2016-17).

Requirements and admission

The EcTd course is targeted at graphic designers who have a great interest in type and typography. The course is very much internationally oriented and the students come from all over the world. Hence the lessons are taught in English. For entering the course, experience in graphic design, combined with basic drawing skills and knowledge of graphic-design software such as Adobe Illustrator, are considered a prerequisite.

The course provides a good alternative for people who do not have time or the opportunity to follow, for example, the Type & Media master course at the Royal Academy of Art in The Hague (KABK) or the master course in type design at the University of Reading. However, in the course of time a number of students who already hold a master's degree in type design from aforementioned institutes joined the EcTd course.



Program, end terms, and diploma

During the first half of the course the students work together on a revival based on the invaluable historical material, i.e., punches, matrices, foundry type, and prints, from the collection of the Museum Plantin-Moretus.

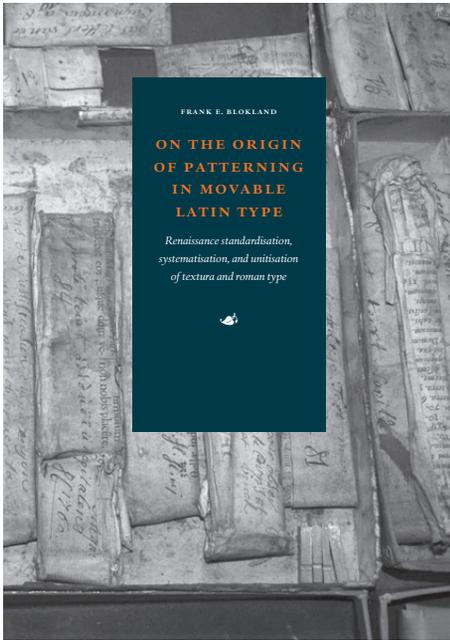
This revival forms the basis for an intensive exchange of insight, perception, and technical know-how between the students, often via closed groups on Facebook and Google.

During the second half of the course the students have to design and to technically develop a new typeface. Initial sketches and proposals are usually already made and discussed during the first half of the course.

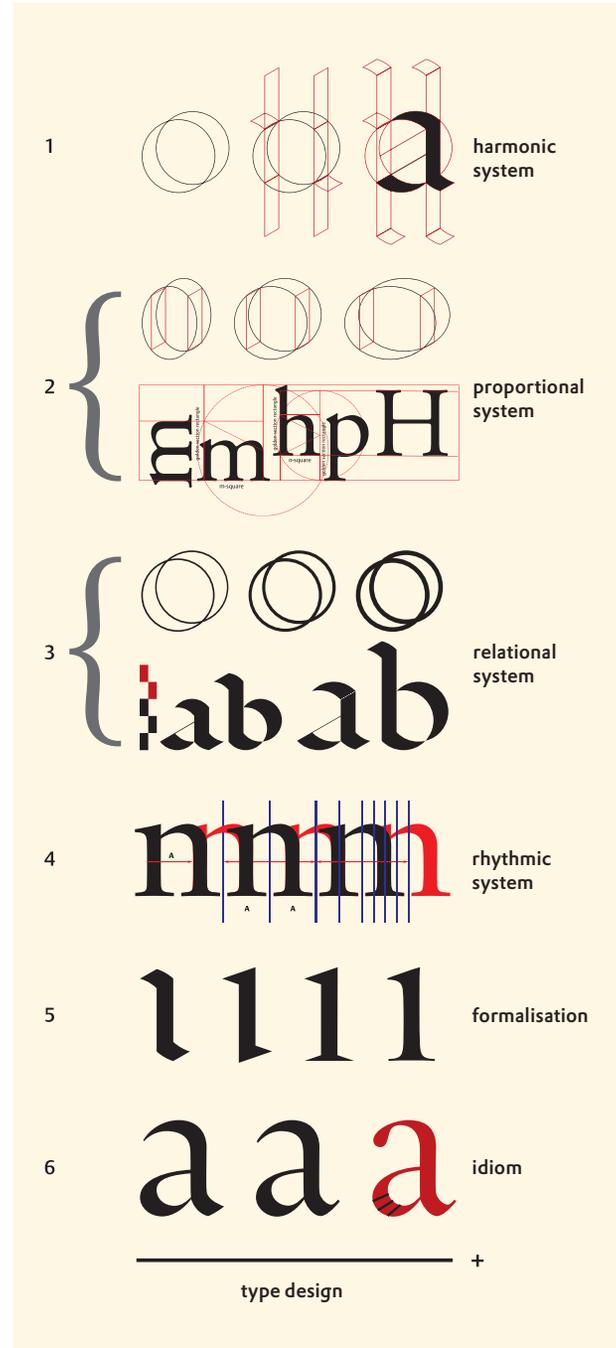
The joined revival and the personal typeface have to be presented in two different booklets with an accompanying text on the process and progress. Evaluation criteria for the personal project are: the depth of the study, the insight in the matter, the aesthetically and technical quality of the produced type, and the originality of the design project.

Students who positively complete the course obtain an officially recognized post-college certificate.

Expert class Type design 2018–19.



Blokland's PhD-research at Leiden University, which was conducted to test the hypothesis that Gutenberg and his peers developed a standardized and unitized system for the production of textura type, which consequently was extrapolated for the production of the morphologically related roman-type model, plays an important role in the course. The students use the outcomes for further investigation of the relation between the morphology and patterning of Renaissance type.



Type design: sum of particles.



Patterning in type is an intrinsic and inseparable structure consisting of the space within letters (counters), space between letters, space between words, and space between lines. In the 15th and 16th century line spacing was often already incorporated, by casting the letters on a larger body ('point size' in modern terms).



The Museum Plantin-Moretus, the only museum on the Unesco World Heritage list, presents more than four hundred years of book printing and family history. The extensive archive of the museum contains 4500 punches, 20.000 matrices and 60 moulds, from Garamont, Granjon, Le Bé, Haultin, Van den Keere, Guyot, Tavernier and others.

Subjects investigated

– with related research questions

1 TYPE, TYPOGRAPHY, AND CONVENTIONS:

What are the restrictions of the systems inherited from the times of foundry type, i.e., with characters on solid rectangles? What do we know about the factors that influenced the proportions and details of the archetypal roman and italic type models? What is the relation between letterforms and typographical conventions? Where do the conventions for present-day digital typography come from?

2 FORM, PROPORTIONS, CONSTRUCTION, CONTRAST-SORTS, AND CONTRAST:

What forms the origin of the proportions, shapes, and details of the historical and modern typefaces that are in use today? Why and in what respect do characters from the style periods differ? What is the relation of type and typography to architecture, sculpture, painting, and music? Which methods can be used to classify type? How and to what extent are the type classifications of, for example, Maximilien Vox and Gerrit Noordzij comparable and overall useful? What is the relation to matters such as contrast-sort and contrast of, for example, serifs?

3 TYPE DESIGN, IDIOM, AND REVIVALS:

What distinguishes one type designer from another? Why and by what features do we recognize and distinguish the type designs of, for example, Garamont, Granjon, Eric Gill, Hermann Zapf, and Jan van Krimpen? What is a revival exactly? How should historical prints be interpreted? How and to what extent should a revival be standardized and adapted to present-day digital technology?

Digital technology: matters and software discussed (summary)

1 MANUAL CONVERSION OF ANALOGUE

DRAWINGS with a digitizer/lens cursor (IKARUS format) or via autotracing, versus direct drawing on screen.

2 CONTOUR DESCRIPTION AND FONT FORMATS:

the IKARUS format, cubic Bézier curves (PostScript Type1/OpenType CFF) and quadratic Bézier curves (TrueType/OpenType TTF).

3 FONT-PRODUCTION TOOLS: Glyphs,

RoboFont, FontLab Studio, FontForge, FoundryMaster, otMaster.

4 GLYPH DATABASES: development of the

glyph set. The construction of character sets. The support of multiple codepages. The (auto) spacing of type.

5 DATA MANAGEMENT AND QUALITY CONTROL:

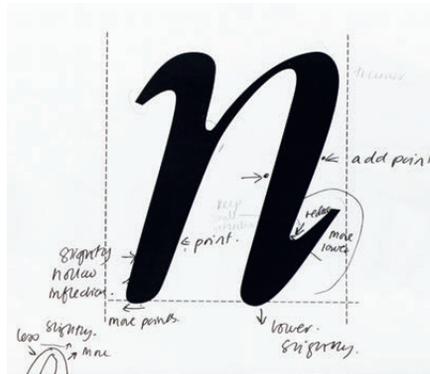
checking and improving the consistency of font data.

6 FONT-FORMAT PROCESSING: the (batch)

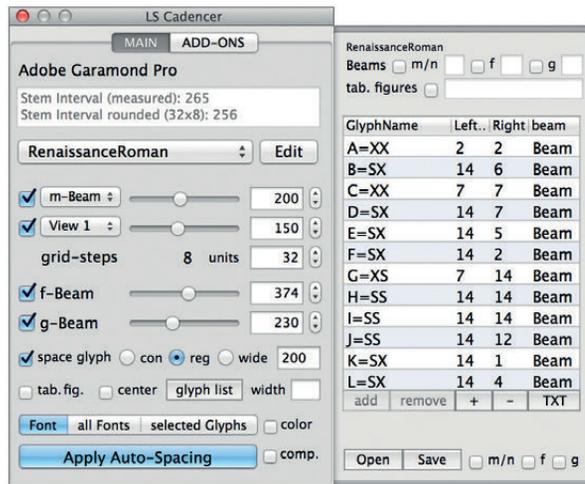
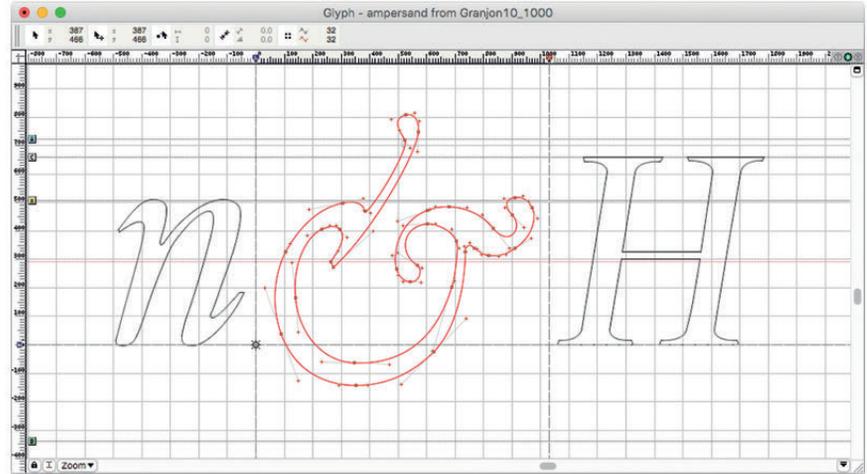
generation of kerning, OpenType Layout features, and hinting.

7 **NEW:** AN IN-DEPTH INTRODUCTION IN

PYTHON SCRIPTING: two daylong sessions taught by guest lecturer Lukas Schneider, who developed the LS Cadencer and LS Consistencer tools



Developing letterforms from sketching through Fontlab Studio. (Eloise Parrack, 2017–18).



The LS Cadencer, which is an application for auto-spacing based on Renaissance patterning, uses the stem interval (the distance between the stems) of the /n or /m as basis for the calculation of the (advanced) character widths. As a second step the calculated stem interval can be adjusted by the user. This way the spacing can be made tighter or looser in an organic way, because the underlying unitization is always distilled from the type itself.





The Expert class
Type design 2016–17
discussing their group
project, a revival of
Garamont's Gros Canon
(1549).



The course culminates in an exhibition that takes place at the Museum Plantin-Moretus, or occasionally at an exquisite location elsewhere in Belgium or the Netherlands. The exhibition in 2019 runs in the Museum Plantin-Moretus, from Oct. 5 till Nov. 17.



Lukas Schneider presenting LS Cadencer at TYPO Labs Berlin.
Photo: Daniel Perraudin.

New: Introduction in Python scripting

Lukas Schneider will provide for two daylong sessions on scripting. As an highly experienced type designer, as well as owner of the Revolver Type Foundry, Lukas is very much familiar with the handling of large amounts of font data. He also scripted the LS Cadencer tool for auto-spacing that is based on algorithms from Frank E. Blokland, who is the EcTd-course's main lecturer. Currently Schneider and Blokland jointly develop another Python tool: LS Consistencer. This small application is, as its name reveals, meant for batch-controlling consistency aspects, such as character widths and stem thickness, within a type design. Lukas holds a master's degree from TypeMedia (ΚΑΒΚ) and is also an EcTd laureate.

COURSE DATES TYPE DESIGN

2019–2020

Calendar: Ten Wednesdays:

November 20 and December 11, 2019,
January 8, January 29, February 19, March 11,
April 1, April 22, May 13 and June 10, 2020.
From 10 a.m. until 16:40 p.m.

Lecturers: Dr. Frank E. Blokland
and Lukas Schneider

Location: Museum Plantin-Moretus,
Vrijdagmarkt 22, 2000 Antwerp, Belgium

Enrolment fee: € 1750

Enrol by sending an email to
plantin.instituut@stad.antwerpen.be

Required equipment:

EcTd students are expected to bring with them a laptop running macOS, Windows, or Linux. They are provided with font production software in the form of demo and open-source versions.

Furthermore some analogue equipment is required: drawing and tracing paper (A4 – 120 grams), propelling pencil (maximum 0.5 mm) with hb or b leads, an eraser, black felt-tip pens (round head, various thicknesses), Stanley knife cutter, adhesive tape, 30 cm ruler (0.5 mm increments), and a broad nib (preferably a Parallel Pen with a 6 mm nib).

Is scripting inevitable in current workflows?

Automation and batch-processing of font data have been intrinsic parts of the digital type production since its early days. The IKARUS system, invented in the 1970s, made the digitization of resolution-independent contours possible.

In the mid-1980s the IKARUS data format got a platform-independent file structure for the handling of large amounts of font data. It was highly suitable for batch-processing, which on DEC VAX computers was controlled with Dec Command Language. Around 1985 the software was migrated to Unix-based machines and batching could be controlled via Unix scripts. The IKARUS system was very expensive and basically only affordable for manufacturers of type-setting machines, who used it to generate their proprietary font formats.

Together with the rise of desktop publishing came a standardization of font formats, i.e., PostScript Type1 and TrueType, which eventually were combined in the OpenType format. New low-priced font tools, for example Fontographer and Fontlab Studio, emerged and the focus shifted from the manual conversion of analogue models (with a lens cursor and tablet) into IKARUS contours, to directly drawing cubic Bézier curves

on the computer's screen. Also the emphasis was not anymore on the handling of large amounts of font data. After all, the new font tools made it possible for type designers to develop their own typefaces. Although the new storage formats made it much simpler to handle small-scale font production than the IKARUS file format, scripting and batch processing had to be built on top when this became needed again.

Python scripting provided the basis for enhancing the relatively limited functionality of the new font tools. Since 1995, when it first showed up in RoboFog (a customized version of Fontographer 3.5), it has become more and more a standard in the font production. Nowadays most of the commonly used font editors, for example Glyphs, RoboFont, and FontLab vi, contain a Python-programming interface, which simplifies the process of accessing data in font files – even for those who are not experienced programmers. Consequently, the type designer can control, customize, and enhance the functionality of existing tools – or can even create new ones. This optional, additional functionality completely changed the mindset of many in the type profession.

A new part of the educational program of the Expert class Type design (EcTd) course of the Plantin Institute of Typography in Antwerp, is an in-depth introduction in Python scripting. Lukas Schneider, who holds a master's degree from TypeMedia and who is also an EcTd laureate, will provide for two daylong sessions on scripting.

The ability to script is undeniably an advantage: after all, it makes the type designer/font producer more flexible. However, during the EcTd course scripting will be, besides taught, also discussed. Is, for example, the current emphasis on scripting due to an inevitable and absolute requirement, or perhaps also the result of common present-day conditioning with certain tools? Is it possible to solve specific technical (or even design) issues by, for example, combining different font tools, instead of constantly being a beta tester of scripts?

After all, it is not the purpose of the EcTd course to stir its students in a certain direction nor to judge the options, but to provide a solid general foundation on which students can base their own conclusions and, in this case, workflow.

Plantin Institute *of Typography*

In addition to the **Expert class Type design** many other post-graduate courses are offered by the Plantin Institute of Typography.

The courses of the **Expert Classes Typography & Design** take place on Saturdays, and are spread over two years. The teaching staff of 30 lecturers focusses on the theoretical and historical aspects, practical knowledge and technical skills. The program follows as close as possible current developments in graphic communications.

The Plantin Institute of Typography also holds an **Expert Class Book Design**, given over the course of seven months. Students are guided and coached during the full-design cycle of a book project. They learn to integrate many sorts of information into one coherent design that makes it easy on the reader to navigate through.

If concise training has your attention, there are five **concise training modules** on offer, selected from the courses of the Expert Classes Typography & Design.

Only the Expert class Type design is English spoken. All our courses are held at the **Museum Plantin-Moretus** in Antwerp.

Expert class Type design

Practicum on Wednesdays
English spoken
Start: November 20, 2019
Duration: one year
Lecturer: Dr. Frank E. Blokland and Lukas Schneider

Expert classes Typography & Design

Lectures on Saturdays
Dutch spoken
Start: September 7, 2019
Duration: two years
Teaching staff: an international team of 30 lecturers

Expert class Book Design

Practicum on Fridays
Dutch spoken
Start: January 24, 2020
Duration: seven months
Lecturer: Johan Van Looveren

Concise training modules

Lectures on Saturdays
Dutch spoken
First principals of typography
| Publishing | History of the printed letter, a.o.

Plantin Institute *of* *Typography*

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