Evolution of Garamond: An Interactive Timeline Demonstrating the Evolution of Garamond

Yeseul Son
ys4842@rit.edu

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Evolution of Garamond

An Interactive Timeline Demonstrating the Evolution of Garamond

By Yeseul Son

A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of Master of Fine Arts in Visual Communication Design

School of Design
College of Imaging Arts and Sciences
Rochester Institute of Technology
Rochester, New York
October, 2018
Thesis Approvals

Evolution of Garamond
An Interactive Timeline Demonstrating the Evolution of Garamond

Submitted by Yeseul Son
Date October 2018

Chief Advisor: Daniel DeLuna, Associate Professor
Visual Communication Design, School of Design
College of Imaging Arts and Sciences

Signature of Chief Advisor  Date

Associate Advisor: Nancy Ciolek, Associate Professor
Visual Communication Design, School of Design
College of Imaging Arts and Sciences

Signature of Associate Advisor  Date

Associate Advisor: Lorrie Frear, Professor
Graphic Design, School of Design
College of Imaging Arts and Sciences

Signature of Associate Advisor  Date
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Abstract

Evolution of Garamond: an Interactive Timeline Demonstrating the Evolution of Garamond

Yeseul Son

Typography is an essential subject that every visual communication design (VCD) student should learn to be a professional. The knowledge and skill of typography can be required in any type of VCD project such as in branding, interaction, or motion graphics design. In consequence, even when VCD students focus on specific fields, polishing their knowledge and skills of the subject can help them become thriving practitioners. This thesis aims to pique their interests in typography, which could help motivate them to self-study the subject, by illustrating the evolution of Garamond: a name of typeface that is descended from letters designed in the early sixteenth century.

The thesis investigates interactive installation as a new way of learning, particularly for those who are embracing the constantly developing digital technology. The proposed solution is to build a visual interface that demonstrates the evolution of Garamond in a timeline, and it involves multiple design methods: information design, graphic design, and interaction design. Conceptually, the visual interface is exhibited in places such as museums, galleries, or at design conferences. Final deliverables of the project are both interactive and animated prototypes. Illustration and character design play an important role in the thesis as a means of efficient visualization of information.

Keywords
Typography, Garamond, interface design, visual interface, prototyping, motion prototype, interaction design, visual identity, graphic design, illustration, character design
Introduction
Situation Analysis

The MFA program in Visual Communication at RIT focuses on communication design, interaction design, motion and 3D digital design. The students can choose to focus on one concentration or pursue a study of cross-disciplinary concentrations. Former or latter, typography is one of the few required classes for them to take.

Typography is a fundamental subject that any VCD student learns to be a successful visual communication designer. Words are one of the most essential means of communications. Many visual communication design projects require knowledge of typography, such as an editorial design project, a mobile application design, a virtual reality game design, or even a 3D animation film. Strong knowledge and skill of typography will help to solidify each piece of work. Therefore, even when focusing on specialties, improving special skills, and gaining knowledge, continuing to study typography enhances the knowledge of the subject and can help students to thrive as professional practitioners.

There are many methods for VCD students to keep learning typography. It can involve various ways: through books or lectures or by visiting museums, galleries, and/or websites. However, there have been new ways of learning due to the constantly evolving technology, and an interactive exhibition is one of the examples. In embracing new digital technologies, interactive exhibitions can offer engaging and pleasing experiences for the audience to understand the new knowledge they acquire and deepen their existing comprehension.
Situation Analysis

Meanwhile, the typeface Garamond is one of the timeless designs throughout the world. Enduring for almost five hundred years, since it was first created in the early sixteenth century by Claude Garamond, a French type designer, it has evolved into numerous different versions; now, Garamond is a given name to the old-style typefaces based on Claude Garamond’s type designs, and the different versions share similar characteristics of the original. First in foundry type, then machine-set type, phototype, and now in digital form, Garamond types remain one of the most famous old-style typefaces.1 Exploring the evolution of the typeface consists of much history, yet it can be an immensely interesting subject to dive into for VCD students.

Thesis Statement

Enhancing the skills and knowledge of the fundamental subject of typography is crucial to becoming a successful visual communication designer. Piquing the target audience’s interests in typography could help with the motivation of self-study and solidify the knowledge and skill of the subject matter. Accordingly, the main goal of the thesis project is to pique the VCD students’ interests in typography by telling the story about the evolution of Garamond. In order to convey the contents, the thesis aims to build a visual interface of an interactive installation.

Great storytelling can increase engagement and provide an immersive experience. The project investigates how to deliver the information of the typeface in an attractive way to present it to the audience, as well as how to visualize the substantial history of the typeface, both efficiently and appealingly. Also, it explores ways to build an easy-to-use visual interface.

The Goal

The thesis proposes a solution to the following questions.

How might this thesis

- Pique VCD students’ interests in typography?
- Present to the audience the evolution of Garamond in an attractive way?
- Make the visualization of the information efficient and appealing?
- Develop a visual interface that is easy to use?
Research
Research Considerations

As the thesis project aims to create a visual interface that conveys the evolution of Garamond, the research concentrates on the three parts: the typeface Garamond, design methodologies, and technology. The diagram below depicts specific topics of each part.

(Figure 1. The Diagram Illustrates the Three Subjects of Research in the Thesis.)
Research on Technology

Exhibition Design with New Technologies

The main focus of technology research is to find a way to deliver the contents without restrictions. In other words, so that people can access the information in as many places as possible. The results of the research that was conducted showed that technologies used in a museum experience served a similar objective: to adapt various forms of interior structures in different types of museums. Some museums used a kinetic camera that senses motions and lets visitors interact with graphics projected on a wall.2 Also, the Getty Museum in Los Angeles utilizes augmented reality (AR) technology to let spectators explore the seventeenth-century cabinet in any place by using a webcam.3

These examples share a common element: a visual interface. In consequence, this research led to the decision to design an interactive visual interface on screens of flexible platforms like a desktop or tablet. Also, AR or virtual reality (VR) technology are not great fits for the project because places like a university gallery or art museum might not always adapt to new technologies as fast.

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Research on Technology

Cooper Hewitt, Smithsonian Design Museum

The interactive tables at the Cooper Hewitt, Smithsonian Design Museum, in New York, are a great example of an exhibition that incorporates a digital interactive design. The museum uses the Pen™ and tables combined with digital technology to actively involve visitors in the experience. The museum installs interactive tables on which a visitor can use the Pen to draw a pattern, make a 3D model, or drag images. Moreover, connected to individual tickets, the Pen allows the visitors to collect information during the visit and permanently keep the records on a dedicated website.⁴

Research on Garamond

As one of the goals of the thesis project, to efficiently showcase the contents, the process of research for Garamond involved not only gathering information but also organizing the findings. The overall research is organized into two parts: a brief introduction and the typefaces placed in a chronological order.

Brief Introduction

Garamond is a name given to a group of old-style typefaces that are descended from letters designed by Claude Garamond in the sixteenth century and by Jean Jannon in the seventeenth century. Similar to some old-style typefaces, it has the visual traits mimicking calligraphy, particularly the handwriting of earlier Italian scholars and scribes, as Claude Garamond designed his first typeface based on his inspiration from Aldus Manutius’ type, a fifteenth-century Italian scholar and humanist.

Garamond is an elegant typeface with calligraphic traits yet with refinements, and it has a higher contrast between thick and thin strokes than a humanist type does. Garamond typeface generally creates high legibility, thus being ideal for body text such as books, newsletters, and other reading material that includes continuous text.
Research on Garamond

Garamond Typefaces in a Chronological Order

The research of Garamond typeface is organized chronologically. Then different unique stories of each typeface have been collected, whereas some information is arranged in mutual categories for each: designers, publishers, places, and which typeface design it comes down from—Claude Garamond or Jean Jannon’s.

(Figure 2. A Graphic Created During the Process of Garamond Research.)

(Figure 3. Graphics Created During the Research on Garamond Types.)
Research on Garamond

Also, the number of weights of each Garamond typeface varies. The diagram that follows outlines the weights of each font placed in the order of lightest to heaviest. However, this list only includes those available on the Universal Type Client, a typeface software that RIT VCD lab provides for the students. Visually arranging the weights helps to not only sort out fonts that are available to use for the final deliverable of the project but also to know which fonts have more family members, which means there can be more examples to apply to the final prototype.

(Figure 4. A List of Garamond Fonts, Available on the Universal Type Client, Created During the Process of Research.)
Research on Garamond

Conceptually, the final product of the project presents as many Garamond examples as possible. However, the thesis project includes seven Garamond types to showcase the concept, including Claude Garamond and Jean Jannon’s typefaces, which many Garamond revivals are descended from. More information on these fonts was available during the research process, meaning there are more stories to tell the audience. Also, they are available on the Universal Type Client (Figure 5). Additionally, each of these seven types of Garamond has interesting stories for the final application of the project. The following is the brief introduction to the research of each type.

(Figure 5. List of Seven Chosen Garamond Fonts.)
Research on Garamond

1530 - Claude Garamond’s types

Many typefaces named Garamond now are derived types designed based on Claude Garamond’s types. Claude Garamond (c.1500–61) was a French type designer and punch cutter based in Paris. He created his first letters from his inspiration of Aldus Manutius’s roman types. After he died, his punches were sold, and his typefaces were scattered throughout Europe. Then, in the early nineteenth century, many type foundries started to create their own versions of Garamond. For example, American Type Founders (ATF) created the ATF Garamond in 1919, and that was the beginning. Then Frederic Goudy, an American type designer, designed Garamont in 1921, and the revival went on in Europe as well as America. The intriguing part to observe is with the different designs of Garamond types, despite them sharing similar traits of those in the sixteenth century. Moreover, evolving for nearly five centuries with the development of type technology, results of the fact that while some Garamond types are hand-set metal fonts, others are in phototype or digital form.

Research on Garamond

1621 - Jean Jannon’s types

Jean Jannon was a French printer, type designer, and punch cutter of the seventeenth century, who attributed to the modern revival of Garamond types. Approximately sixty years after Claude Garamond’s death, he designed letters influenced by Garamond’s types.

Although his letter design had similar traits with those of Claude Garamond, Jannon made some individual features on his types.6

After the revival of Garamond types began in the early nineteenth century, Beatrice Warde, an American scholar of typography, discovered the fact that some of the Garamond typefaces were believed to be based on Claude Garamond’s; however, they were actually based on Jean Jannon’s. It was when she was working at the ATF that after seeing the type design that the ATF Garamond was based on (according to the foundry), Ward thought she had never seen a sixteenth-century typeface that looked like that. Then she happened to discover Jannon’s work when visiting the North Library of the British Museum.7 Later in 1927, she published an article delivering the result of her investigation on Garamond types in The Fleuron (a British journal of typography), under the pen name Paul Beaujon; a man’s name she used to protect that she was a female writer. Her discovery of Garamond’s origin led her to a new occupation at Monotype Ltd. in London, even though they were surprised that Paul Beaujon was a “she.”

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Evolution of Garamond | Yeseul Son
Research on Garamond

1917 - Garamond No.3

The Mergenthaler Linotype Company produced a Garamond that was identical to ATF’s Garamond and adapted it to their Linotype machine, which enabled traditional metal types to be cast in lines. A book Anatomy of a Typeface by Alexander S. Lawson introduces the fact that “. . . the firm felt economically obliged to issue a type identical to ATF’s standard Garamond, calling the copy Garamond No.3. The firm’s business sense proved acute, as this type soon became the most widely used of all Garamonds in the United States.”

The ATF Garamond, issued by American Type Founders in 1917, was the first Garamond revival. It was designed by Morris Fuller Benton (1872-1948), the head of typeface development in the company. Thomas Maitland Cleland (1880-1964) was his collaborator who created matching ornaments and borders. The model of this Garamond was based on the Caractères de l’Université group of types. Later Beatrice Warde, who was a librarian at the company, discovered the fact that this was a specimen of Jean Jannon’s types.

8  Lawson, Anatomy of a Typeface, 139-140.
9  Lawson, 137-138.
Research on Garamond

1925 - Stempel Garamond

Stempel Garamond was one of the true Garamond revivals since it was designed based on the Egenolff-Berner specimen sheet of 1592 that shows Claude Garamond’s roman types. As a machine-set metal type, it was first issued in 1925 by Stempel Type Foundry (D. Stempel AG) in Frankfurt am Main, Germany, and released through Linotype in other countries. “In the early 1900s, Stempel developed an exclusive relationship with Linotype, becoming one of just a few producers of matrices for the Linotype Machine worldwide.” Once released, it has remained one of the frequently used text fonts.

Many evaluate that the design has unique characteristics. Allan Haley, an author and typography expert, said Stempel Garamond epitomizes the European style of Garamonds. “Its strong calligraphic influence, vivid contrast in stroke thickness, small x-height, and traditional wide capitals create a lively texture on the page.” The Linotype website states that, “Stempel Garamond has its own unique temperament, with a rhythm and sharpness that set it apart from other Garamonds.” Also, “This design is a good sharp cut; it suffers from very short descenders made to fit it on the German standard alignment of the period, which was based on Blackletter proportions,” stated on the MyFonts website.

11 Haley, “A Flock of Garamonds.”
Research on Garamond

1964 - Sabon

Sabon is one of the Garamond typefaces that does not include “Garamond” in its name. It is the work of Jan Tschichold (1902 - 1974), the eminent German graphic designer and typographer. He named the typeface after Jacques Sabon, who was a French punch cutter and student of Claude Garamond. Sabon is reputed to have brought the Garamond matrices to Germany.\(^{14}\)

Tschichold produced this typeface since a group of German printers wanted to have a typeface that would look the same whether set by hand or on Monotype or Linotype machines.\(^{15}\) As Stempel Garamond was, this typeface was also designed based on the 1592 specimen sheet by the Egenolff-Berner foundry, which are Claude Garamond’s types.\(^{16}\)

The writer on design and typography, Simon Loxley, states, “It is one of the very best serif text faces, beautifully weighted, superbly readable, elegant yet friendly at the same time, an extremely difficult combination to achieve.”\(^{17}\)

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15 Loxley, 170.
16 Linotype, “Just What Makes a ‘Garamond’ a Garamond?”
17 Loxley, 170.
Research on Garamond

1975 - ITC Garamond

ITC Garamond was designed by Tony Stan, who was a contemporary type designer at the International Type Corporation (ITC) in 1975. The typeface has a unique appearance, which makes it look less likely to be an interpretation of the authentic sixteenth-century Garamond. It has a tremendously high x-height, for example. Allan Haley mentions this design in his article.

ITC Garamond is almost in a class unto itself—it's like a Hummer is to an automobile. It's gargantuan x-height, wide proportions, and exaggerated character shapes make the design a caricature of more traditional fonts.

Unfortunately, because of this, many designers look down their nose at ITC Garamond. Few realize that the design was never intended to be a classic interpretation of the 16th century font. In 1984, it was adopted as Apple Garamond, with customized adjustment, being condensed horizontally 80 percent. It was used on Apple's packaging and advertisements; one example is the “Think different.” slogan with the rainbow color version of the Apple logo above. Later in 2002, this official Apple font was replaced with Myriad.

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19 Haley, "A Flock of Garamonds."
Research on Garamond

1989 - Adobe Garamond

Adobe Garamond was designed by Robert Slimbach, an in-house type designer at Adobe, and it was released in 1989. He created not only roman type fonts but also italics, which are from different inspirations. While the roman type fonts were based on those of Claude Garamond created in the sixteenth century, italics were drawn based on those of Robert Granjon, who was a sixteenth-century French type designer.21

The process of creating Adobe Garamond included that Slimbach, along with two others, “traveled to the Plantin-Moretus Museum in Antwerp, Belgium, to study firsthand and photograph Garamond’s and Granjon’s types and printed samples,”22 As well as that, he had studied reproduced samples of Claude Garamond’s typefaces.23

Adobe Garamond has high readability. The world-famous book series, *Harry Potter*, used the font as its body text for the American edition of *Harry Potter and the Deathly Hallows*, as the colophon section of the book introduces.

This book was art directed by David Saylor. The art for both the jacket and the interior was created using pastels on toned printmaking paper. The text was set in 12-point Adobe Garamond, a typeface based on the sixteenth-century type designs of Claude Garamond, redrawn by Robert Slimbach in 1989. 24

23 See note 22 above.
The Cary Graphic Arts Collection in RIT is a library that archives graphic design sources, such as printings, bookbindings, type designs, and other historical graphic-design materials. The process of the research involved visiting the library many times. The key findings from the library are the photo sources of Garamond that can be used to exhibit the final product of the thesis. In addition, research from the library included getting access to various types of sources related to the subject, such as watching the documentary *Making Faces*, which shows how to make metal types, reading books deeply about the history of the typeface, and getting other book recommendations that led to further research outside the collection.

(Figure 6. Some of the Photographs Taken at the Collection.)
Survey of Literature

Typography

A Flock of Garamonds

Written by Allan Haley, who is a well-known typographer, this article briefly introduces the history and traits of the typeface and discusses Garamond type in different groups such as “Garamond Family Tree,” “More Perfection at a Price,” “Oldest New Garamond,” “A Graceful Garamond,” “A Lively European.”

An Exhibit of Garamond Type

This book introduces the Garamond typeface and its brief history. The interesting part of the book is that it presents some appropriate ornaments to use with Garamond types, like organic and sophisticated illustrations, such as an arrangement of vine leaves.
Survey of Literature

Anatomy of a Typeface

The text conveys thorough historical explanations about the Garamond typeface. For instance, it introduces a story of the principal purchasers of Garamond matrices, as well as Sabon’s widow’s story. It is a great source for study of Garamond from the sixteenth century to the twentieth century.

Classic Typefaces: American Type and Type Designers

Introducing American type design and type designers, the book includes a chapter about Benton and Morris Fuller, as well as the International Typeface Corporation (ITC) chapter where it mentions Tony Stan.

Designing with Type: The Essential Guide to Typography

This book covers essential knowledge of typography. It classifies five classic typefaces to represent each stage in the evolution of type design, one of which is Garamond representing an old-style typeface. It depicts the specific traits of a Garamond typeface. In addition, it shows the actual applications of Garamond with different type sizes and line spacing for readers to observe its legibility.
Survey of Literature

From Gutenberg to Opentype

This book covers types from the earliest to the latest history, starting from Gutenberg’s invention of movable type and Gothic blackletters, followed by Roman types. Also, it presents not only Garamond as a French old-style typeface but it also introduces digital versions of Garamond types. Besides, it includes illustrations that depict how punch cutting, Linotype machines, and Monotype casters look like.

Making Faces

This documentary shares Jim Rimmer’s process of making metal fonts as well as digital fonts. Jim Rimmer was a Canadian type designer and was almost the only practitioner who had the skill of creating metal types. Showing his process in detail, the film gives great insights of how a designer creates a metal typeface from the beginning to the end.
Survey of Literature

Meggs’ History of Graphic Design, 5th edition, Wiley

One of the famous books for graphic-design students to read as it covers a broad range of graphic-design history with numerous examples. Since it carries a considerable amount of information of graphic design, it covers many aspects of the Garamond typeface, such as Garamond, movable type, and an old-style typeface. It conveys Claude Garamond’s life and his contribution to typography at the time.

Thinking with Type: A Critical Guide for Designers, Writers, Editors & Students

Introducing typography from a single letter, a group of text, to a grid system, the book discusses humanist types and demonstrates Garamond typefaces and the implication and purpose of each type.

Seventy-nine Short Essays on Design

In one of the essays, “I Hate ITC Garamond,” the author discusses ITC Garamond and his opinion on the design, including a brief historical background.
Survey of Literature

The Bentons

This book provides metal type making technology in the beginning part with detailed illustrations and terminologies of many kinds of mechanics in metal types. Also, it briefly introduces Claude Garamond’s story and some of the revival Garamond types.

The Type Specimen of Jean Jannon

Written by Beatrice Warde, a scholar of typography, who found that many Garamond typefaces were actually based on Jean Jannon’s type design, not Claude Garamond’s typefaces.

Thinking with Type: A Critical Guide for Designers, Writers, Editors & Students

Introducing typography from a single letter, a group of text, to a grid system, the book discusses humanist types and demonstrates Garamond typefaces and the implication and purpose of each type.
Survey of Literature

**TYPE IN PRINT: Classics Study: The typefaces of Robert Slimbach**

This article includes the discussion on Robert Slimbach and one of his typefaces, Adobe Garamond. It describes the success of the typeface and introduces the designer’s process of developing the typeface.

**Type: The Secret History of Letters**

This book includes a section, Garamond, which presents the detailed historical explanation of how and when Garamond’s revivals were created. Also, it outlines type technologies in the history including punch cutting, metal letters, and wooden types.

**Typographic Design: Form and Communication**

This book offers great comprehension of what typography is, outlining overall information about typography including the history, technology, and design process. Regarding the thesis project, it provides interesting information. It shows the evolution of typography over the thousands of years as well as the evolution of typographic technology.
Survey of Literature

Information Design

Envisioning Information

Written by a pioneer of information design, Edward Tufte. The book provided great design examples in terms of accuracy, efficiency, sophistication, or descriptiveness that the author had collected.

Infographic Designers’ Sketchbooks

This book presents sketches from eminent infographic designers and their final works. The sketches reflect the designers' thinking. Many design solutions are provided by the book, helping with brainstorming during the process of the thesis plan.

The Visual Display of Quantitative Information

This book is interesting because it guides audiences on how to design information in an efficient way, considering practical aspects such as with ink, readability, and correctness. It is notable that the book shows how a graph can be as simple as possible while being accurate at the same time.
Survey of Literature

Motion Graphics

After Effects and Cinema 4D Lite

The author provides the knowledge of Cinema 4D and After Effects with easy instructions and clear examples. This book helped in the thesis project by providing knowledge of how to build motion prototypes and showed interactions of the interface.

Creating Motion Graphics with After Effects

This book provided a thorough guide of how to work in After Effects. Since After Effects has many features and functions, it can be sometimes difficult and confusing to use the software. It is especially useful to see the detailed explanations and tips.
Design Process
The goal of the thesis is to develop a visual interface demonstrating the evolution of Garamond, which will ultimately pique the VCD students’ interest in typography. The concept of the project is in designing the visual interface to be displayed on an interactive table, which can be easily reached by the target audience since it can be installed in any place, such as a university gallery, design conference, gallery café, or design or art museums. The following illustration describes the concept of the interactive table.

(Figure 7. The Illustration of a Man in Front of the Kiosk.)
Design Concept

Timeline, Illustrations, and Characters

The main elements of the visual interface are the timeline, illustrations, and characters. These add value in enabling efficient and visually appealing transmission of considerable and complex information, which is one of the objectives of the project. The purpose of designing a timeline is not only to visually explain the evolution of the typeface but also to show the changes in the forms of one typeface to the next or previous one. Moreover, using characters and illustrations serves many purposes. First, it can provide context of information. In particular, the characters and illustrations are used to help audiences understand when and where a typeface was created. Also, they are efficiently used to represent a key point of context. The third purpose of using characters and illustrations is to trigger the users’ interest through visuals instead of text-heavy information, which helps to offer an engaging experience. Furthermore, it can provide easier comprehension of the content.
Primary Persona

Demographics
Jenna Hanson
23 years old
Graduate student in VCD master’s program at RIT
Undergraduate degree in Interior Design
Rochester, NY

Archetype
Jenna, a graduate student in Visual Communication Design at RIT, focuses on 3D digital design and motion graphics. Her undergraduate major was interior design, so she first learned typography as an essential class at the beginning of her graduate study. However, she does not pay much attention to typography now. She spends most of her day tackling 3D design and motion graphics projects and studying these subjects deeply every day. Other than this major block of time, she likes to explore other designers’ work regardless of which field of design it is.

Interests
Socializing, drawing, 3D animation films
Secondary Persona

Demographics
Matthew Harris
17 years old
High school student
San Francisco, CA

Archetype
Matthew is a senior high-school student living in San Francisco. As he is about to graduate from the school next year, he has carefully been considering what he wants to major in at the university. One of his big interests is design. Since he was young, he liked to draw posters, and he created a flier for his friend’s mini concert. He also has built his personal blog website where he discusses NBA games. He is trying to develop a program to present the visualization of NBA games statistics on his website.

Interests
Butterflies, watching and playing basketball
## Trinary Persona

| Demographics | Timothy Watt  
|  | 28 years old  
|  | Owner of a bakery  
|  | Undergraduate degree in hotel management  
|  | Austin, TX |

### Archetype

Timothy is an owner of a neighborhood bakery in downtown Austin. He specialized in making French pastries and cupcakes. He has two employees, and his store has been selected as the best bakery in the area. People love his business and are willing to wait in line to taste the sweets. He is considering expanding the business to another area. He has been told by his friend that re-branding can help attract more customers, so he recently visited a design museum to get inspiration for his business.

### Interests

Running, kayaking
User Scenario

Context
Jenna went shopping with her friend and on the way saw an advertisement for a design exhibition at an art and design museum. As a graduate student studying visual communication design, she likes to explore design works. She plans to visit the exhibition with one of her classmates who also enjoys going to museums.

Usage
At the museum, she saw the Evolution of Garamond on an interactive table. It reminded her of the old-style typefaces she had recently learned in a typography class. Navigating the timeline, she learned about each version of Garamond and played with different Garamond typefaces.

Outcomes
After the exhibition, she had lab work that she needed to do for classes, and many of them were involved in typography decisions. She recalled her inspiration from the Evolution of Garamond and started to do her own research on typefaces and typography to polish up her work.

(Figure 8. The User Scenario of the Primary Persona)
Based on the research, the overall storytelling is divided into the three main parts: Story, Timeline, and Sources. The sitemap portrays the structure of the interface (Figure 9).

To explain the sitemap, the Main screen is a walk-through set displaying transitions between each version of Garamond in a chronological order. Once a user approaches the exhibition and interacts with the screen (by touch or click), it will lead to the menu page where it shows the three sections that they can choose from to go next: Story, Timeline, or Sources.

The Story section briefly introduces the four interesting points about the Garamond typeface: Elegance, Two Origins, Old-style, and XX. The Timeline is the main part of the exhibition, which a user can scroll from the first to the latest Garamond typeface. Each time slot includes three or four parts: its Main page, More Info, Gallery, and Let’s Type. The Sources section is an archive displaying all the sources that are presented in the exhibition, and it provides access to the sources.
Wireframes and Low Fidelity Prototypes

Building and testing the low fidelity (low-fi) prototypes helped to envision the potential layouts and develop them further through to the final version of wireframe after receiving feedback from the program’s professors and peers.

There were iterations from the first (Figure 10) to the last version of low-fi prototypes (Figure 11). Each prototype was tested on the InVision app that enabled simulation of the interaction.

(Figure 10. The First Version of Low-Fi Prototype.)

(Figure 11. The Second Version of Low-Fi Prototype.)
Final Wireframe

Visualization of the Timeline

In addition to the several versions of the wireframes, there were explorations and iterations to help visualize the timeline. The reasons for choosing the final version were:

- Tell you where you are
- What are the previous years or the next
- Intuitively tell you to slide left or right to navigate
- To match the style guide, which will be shown in the following section

(Figure 12. The Iterations of the Timeline Design.)
Visual Design

The style guide provides a consistent look and feel throughout one's entire experience. Considering the goal of the thesis, it aims to communicate the three concepts: a clean and organized presentation, informative, easy to use. These intended concepts are coherently delivered by the visual elements: the visual identity, logo, colors, typography, icons, characters and illustrations, and app layout and grids.

(Figure 13. A Diagram Depicting the Three Concepts of the Visual Identity.)
**Visual Design**

**The Visual Identity**

As an old-style typeface, the shapes of Garamond typefaces are organic. To effectively present these organic shapes, the visual identity uses simple and geometric elements. The main representation of the geometric shapes is a rectangle. In consequence, rectangles are the main visual elements of the thesis project.

(Figure 14. The Analytic Process of Choosing a Rectangle as the Main Visual Element of the Project.)
Visual Design

Logo Design

The logo design was inspired from the molds that make a hot metal-type, which was one of the tools Claude Garamond used to make his typefaces. Combined with the first alphabet letter of the project name, “Evolution of Garamond,” the logo symbolizes a metal mold that is filled in with hot fluid metal.

(Figure 15. The Logo Metaphors and Symbol of the Logo.)
Color Palette

The overall color palette consists of soft and calm colors to clearly display the information and build the storytelling in an organized way. Each section of the project is color-coded to allow easier navigation. Also, it uses a monochrome palette, which creates depth and variation of each section.

The accent color is to provide easy guidance and a clear hierarchy on the screen. This color is a representation of the hot metal, and it is easily distinguished from other colors by a higher saturation.

(Figure 16. Color Palette.)
Visual Design

Typography

This thesis uses the typeface Roboto for the interface. Roboto is a geometric sans-serif typeface designed by Christian Robertson. Despite its geometric look, it does not look completely rigid. It looks smooth and soft at the same time, which visually enables soft, easy, and comfortable storytelling. It has a total of 12 styles: six weights and italics of each weight. The below figure, specifically, describes the typography system using three styles of Roboto: the Black, Bold, and Medium.

(Figure 17. Typography.)
Visual Design

Iconography

The icons for the thesis project are formed with simple geometric shapes. Every icon is outlined in a square frame. They are designed based on a 64 px grid.

(Figure 18. A Collection of Iconographic Designs.)
To make the storytelling attractive, as one of the goals of the thesis, there is the use of illustrations and characters. They represent a key point or an interesting part of the information shown on each screen as well as describing the context and background of the written stories. Using illustrations and characters applies to all the three parts of the interface: Story, Timeline, and Sources.

(Figure 19. Illustration of Historical Buildings Used on Backgrounds.)
Characters and Illustrations

The following describes what and how illustrations and characters are used on each screen.

Part 1. Story

The Story section consists of four key points about Garamond: Elegance, Old Style, Readability, and Two Origins. Characters are used to represent key information of context on each screen, and illustrations form the background that is contextually related to the points.

(Figure 20. The Character Design Inspired by the Metal Types.)
Characters and Illustrations

Screen 1. Elegance

The first screen of the section briefly introduces the elegance of the typeface by its form and background story. All characters are metal types, and the character for Elegance is designed based on the queen in a deck of cards. The illustration in the background represents sixteenth-century Paris—the place and time when the Garamond type was first created.

(Figure 21. The Background Illustration and character of Elegance.)
Characters and Illustrations

Screen 2. Old-style

The second screen conveys the characteristics that Garamond type has as an old-style typeface. The metal type character is based on an image of an old-man in sixteenth-century France, with his stylish mustache, glasses, and beret, holding a cane. He is in the background depicting a scene of punch cutting in the sixteenth century.

(Figure 22. The Background Illustration and Character for Old Style.)
Characters and Illustrations

**Screen 3. Readability**

The Readability page outlines Garamond typefaces’ excellent readability, so it’s popular for body text in books. The character is reading a book in his hand and is a representation of not only readability but also the fact of Garamond’s popularity and its contribution to many published books. The background illustration portrays sixteenth-century Paris with the architectural building Palace of Fontainebleau.

(Figure 23. The Background Illustration and Character of Readability.)

Characters and Illustrations

Screen 4. Two Origins

The last page delivers that the revival of the Garamond typeface was designed based on two different typefaces, not only Claude Garamond’s types but also Jean Jannon’s, who was a French type designer; thus, the two characters are a representation of both type designers. The illustration in the background includes the architectural building Place des Vosges in the seventeenth century—the time Jean Jannon issued a specimen of typefaces.

(Figure 24. The Background Illustration and Character of Two Origins.)
Part 2. Timeline

The Timeline consists of seven time slots: one slot per screen. Illustrations are used to depict the specific information shown on each slot. To make the transition from one screen to the next smooth and natural, the illustration in the background is drawn connected. The things illustrated on each time slot are determined based on the research section of the thesis. Below presents the illustrations and colors of each screen.

First Slot. 1530

(Figure 25. Illustration Elements of the 1530 Screen.)
Characters and Illustrations

Second Slot. 1621

(Figure 26. Illustration Elements of the 1621 Screen.)

Third Slot. 1917

(Figure 27. Illustration Elements of the 1917 Screen.)
Characters and Illustrations

Fourth Slot. 1925

(Figure 28. Illustration Elements of the 1925 Screen.)

Fifth Slot. 1964

(Figure 29. Illustration Elements of the 1964 Screen.)
Characters and Illustrations

Sixth Slot. 1975

(Figure 30. Illustration Elements of the 1975 Screen.)

Seventh Slot. 1989

(Figure 31. Illustration Elements of the 1989 Screen.)
Characters and Illustrations

Part 3. Sources

Since the Sources section is an archive that displays the sources used for the written information of the exhibition, illustrations of that section portray a library-like archive room including a lot of bookshelves, and other props, such as desks and chairs, plants, frames.

(Figure 32. The Background Illustration of Sources.)
Final Application
Final Application

The final application was executed with the use of several software programs. First, it used the Adobe Illustrator to create the delicate artwork, including the logo, characters, illustrations, and color palettes. The process of building the entire screens and iterating the design process in an organized manner was done in the Sketch app.

Creating prototypes were executed both in Flinto and Adobe After Effects. While Flinto was used to develop both interactive and animated prototypes, After Effects provided an advantage to create animated prototypes that described more detailed interactions.
The First Experience

The first experience of a visitor starts with seeing the animated screen that shows the transition from one Garamond revival typeface to the next one and keeps going as a loop. Remaining static at the center of the screen is a call-to-action button "Explore" (Figure 33). Clicking on the logo at the top left allows a user to come back to the first screen.

(Figure 33. The Storyboard of the Animation on the First Experience Screen.)
Final Application

This will lead to the page that introduces the Garamond typeface. On this page, the visitor can choose to "Explore," which is connected to a menu page, while the "Replay" button goes back to the first animated screen (Figure 34). The menu page gives access to all the three parts of the exhibition: Story, Timeline, and Sources (Figure 35). The menu icon is consistently available at the top right of the screen.
Final Application

Part 1. Story

Once a user enters the Story part, they are introduced to the walk-through of the four key stories about the Garamond typeface in the order of Elegance, Old Style, Readability, and Two Origins (Figure 36).

(Figure 36. The Four Key Stories Screens.)
Final Application

On each page of the walk-through, the user can choose to “Read More” if they are interested in further information (Figure 37).

(Figure 37. “Read More” Screens.)
Final Application

On the last page, after sliding through all four stories, there will be a suggestion for the user to explore more in the part-two Timeline, or they will be able to go back to the Story (Figure 38).

(Figure 38. The Last Page of the Story Section.)
Part 2. Timeline

The main navigation to the Timeline part is by using the timeline slide, which is always shown at the bottom. The timeline slide consists of seven time slots, (meaning the years of the seven selected Garamond revivals) in a chronological order. Each time slot page introduces the brief and organized information about the Garamond of that year (Figure 39).
Final Application

(Figure 39. Timeline Screens.)
Final Application

On the right side of each page, there are four buttons for a user to explore further about the selected typeface: Garamond, More Info, Gallery, and Let’s Type. The Garamond is the main page a user first sees, once entering a time slot. However, the Let’s Type function is not available on the first two time slots since they present Claude Garamond and Jean Jannon’s typefaces, which are not digitally available.

Once a user clicks on More Info, it shows additional information about the typeface organized into various subjects. For instance, the More Info section of ITC Garamond presents information about its appearance, the story that it was developed as Apple Garamond, and the designer of the typeface Tony Stan (Figure 40).

(Figure 40. More Info about ITC Garamond.)
The Gallery section displays images and pictures of examples that used the chosen typeface (Figure 41).

(Figure 41. Gallery Screens.)
Final Application

If a user slides the timeline at the bottom while not being on the main page Garamond, a screen appears asking if the user is sure he or she wants to move to another slot (Figure 42).

(Figure 42. Popover Screen to Confirm Jumping between Time Slots.)
Final Application

Let’s Type is a section that allows a visitor to play around with the Garamond typefaces. Once entered, a keyboard appears from the bottom with the cursor flickering after the word “Type something…”

Once the user starts to type, the Toolbox icon appears. The Toolbox includes tools that enable a user to manipulate character and paragraph settings, such as type weight, size, and alignment, as well as colors of text and background. A user can borrow a dummy text in the form of a word, sentence, or paragraph on the screen, which lets a user focus on exploring the typeface without having to think about what to type (Figure 43).
Part 3. Sources

In the Sources section, the user can get access to the sources for the written information on the exhibition that is linked to the Internet. The archive is organized into different types of sources: websites, films, books, journal articles, libraries, and museums. There is a search bar fixed on the left side, which can help a user efficiently find a source.
Final Application

The Interactive Animated Prototype

One of the main deliverables of the thesis project is the interactive and animated prototypes. This software enables a user to test with a prototype including (User Interface) UI animations.
Evaluations
The evaluation of the Evolution of Garamond aims to see if the project’s goals were successfully achieved as well as to get feedback on other aspects and observe overall user behaviors.

At the beginning of the thesis process, communicating with the advisors, professors, and classmates, and getting feedback from them, helped to sort out information on Garamond to present it efficiently in the exhibition, build a few iterations of wireframes, and develop the visual design.

The user testing was conducted at Imagine RIT, a campus-wide event that showcased innovative and creative works, held May 6, 2017. This event was a great opportunity for the user survey since the project could be displayed in a design museum-like environment by being a part of the exhibition of visual communication design projects from the department. Also, it enabled the ability to collect feedback from not only the target audience, but also from other visitors.

The interactive prototype was displayed on a Mac 25-inch screen, which is not the ideal dimension but large enough to simulate the design concept shown in Chapter 3. After a visitor experienced the interactive prototype and optionally watched the motion prototypes, they filled out the survey form with the research questions (Figure 45).
The results showed that the thesis project successfully achieved the main goal of piquing the audience’s interest in typography. (See Appendix B for all responses.) All participants agreed that the exhibition piqued their interest in typography. Eleven out of twelve participants had a professional or educational background related to design.

As for usability, the test result showed 91 percent were positive for the question asking if the timeline was easy to navigate.

Also, all the participants responded “yes” to the question asking if the illustrations attracted them to want to learn more about the contents. Five number of all participants wrote down that the parts they most liked were characters and Illustrations design. In terms of visuals, eleven out of twelve participants marked how they liked them as “extremely” or “very appealing.”

(Figure 45. The Survey Form.)
Conclusion
Conclusion

This thesis started at the importance of typography, which led to the goal of how to pique the VCD students’ interest in typography. It involved research of the Garamond typeface and interactive exhibitions with digital technology. The proposed solution was to develop the interactive-timeline exhibition. With the user testing done, the conclusion was that the goals were successfully achieved.

The process of the project involved learning about the importance of listening to feedback from the target audience and conducting user surveys. Building prototypes for user testing is another thing I learned. Also, there were the added gains in learning how to visualize a lot of complex information in an attractive and efficient way. The style guide helped in offering a consistent visual identity throughout the entire experience and attention to details helped to improve the project’s features.

We as visual communication designers have a deeper understating about the timeless design and aesthetics as well as design knowledge and skills. Typography is something that never goes away as a basic communication tool. Solid understanding improves the work and brings it to another level. And interest keeps us motivated to hone our knowledge and skills. Thus, creating communications by design makes a better world.
Bibliography


Bibliography


Bibliography


Appendix A. User Survey

Imagine RIT Feedback Survey  May 6, 2017

Evolution of Garamond  Yoseul Son

1. Do you have a professional/educational background related to design?  Yes  No
2. Does this exhibition pique your interest in typography?  Yes  No
3. Does the illustrations attract you to learn more about the contents?  Yes  No
4. Is the timeline easy to navigate?  Yes  No
5. How visually appealing is this project?  Not at all appealing  Not so appealing  Somewhat appealing  Very appealing  Extremely appealing
6. What are the words that come to your mind when you look at the design?  Easy to look at
7. What part do you most like about the project?  BYU
8. What part do you most dislike about the project?  A little hard to navigate
9. Any other comments?
Appendices

Appendix A. User Survey

Imagine RT Feedback Survey
May 6, 2017
Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design? [ ] Yes [ ] No

2. Does this exhibition pique your interest in typography? [ ] Yes [ ] No

3. Does the illustrations attract you to learn more about the contents? [ ] Yes [ ] No

4. Is the timeline easy to navigate? [ ] Yes [ ] No

5. How visually appealing is this project? [ ] Not at all appealing [ ] Not so appealing [ ] Somewhat appealing [ ] Very appealing [ ] Extremely appealing

6. What are the words come to your mind when you look at the design? ______

7. What part do you most like about the project? ______

8. What part do you most dislike about the project? ______

9. Any other comments? ______

Imagine RT Feedback Survey
May 6, 2017
Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design? [ ] Yes [ ] No

2. Does this exhibition pique your interest in typography? [ ] Yes [ ] No

3. Does the illustrations attract you to learn more about the contents? [ ] Yes [ ] No

4. Is the timeline easy to navigate? [ ] Yes [ ] No

5. How visually appealing is this project? [ ] Not at all appealing [ ] Not so appealing [ ] Somewhat appealing [ ] Very appealing [ ] Extremely appealing

6. What are the words come to your mind when you look at the design? ______

7. What part do you most like about the project? ______

8. What part do you most dislike about the project? ______

9. Any other comments? ______
Appendix A. User Survey

Imagine RIT Feedback Survey
May 6, 2017

Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design? □ Yes □ No
2. Does this exhibition pique your interest in typography? □ Yes □ No
3. Does the illustrations attract you to learn more about the contents? □ Yes □ No
4. Is the timeline easy to navigate? □ Yes □ No

5. How visually appealing is this project?
   [ ] Not at all appealing [ ] Not appealing [ ] Somewhat appealing [ ] Very appealing [ ] Extremely appealing

6. What are the words that come to your mind when you look at the design? [ ]

7. What part do you most like about the project? [ ]

8. What part do you most dislike about the project? [ ]

9. Any other comments? [ ]

---

Imagine RIT Feedback Survey
May 5, 2017

Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design? □ Yes □ No
2. Does this exhibition pique your interest in typography? □ Yes □ No
3. Does the illustrations attract you to learn more about the contents? □ Yes □ No
4. Is the timeline easy to navigate? □ Yes □ No

5. How visually appealing is this project?
   [ ] Not at all appealing [ ] Not appealing [ ] Somewhat appealing [ ] Very appealing [ ] Extremely appealing

6. What are the words that come to your mind when you look at the design? [ ]

7. What part do you most like about the project? [ ]

8. What part do you most dislike about the project? [ ]

9. Any other comments? [ ]

---

Evolution of Garamond | Yeseul Son
Appendix A. User Survey

Imagine RIT Feedback Survey
May 6, 2017

Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design?  
   [ ] Yes  [ ] No

2. Does this exhibition pique your interest in typography?  
   [ ] Yes  [ ] No

3. Does the illustrations attract you to learn more about the contents?  
   [ ] Yes  [ ] No

4. Is the timeline easy to navigate?  
   [ ] Yes  [ ] No

5. How visually appealing is this project?  
   [ ] Not at all appealing  [ ] Not appealing  [ ] Somewhat appealing  [ ] Very appealing  [ ] Extremely appealing

6. What are the words come to your mind when you look at the design?  
   Simple  Playful  Joyful

7. What part do you most like about the project?  
   Illustration  UI  Typeface (Really well designed with antique atmosphere)

8. What part do you most dislike about the project?  
   Nothing.

9. Any other comments?  
   Looks really good! Wish to see full product someday!
Appendices

Appendix A. User Survey

Imagine RIT Feedback Survey
May 6, 2017
Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design? □Yes □No
2. Does this exhibition pique your interest in typography? □Yes □No
3. Do the illustrations attract you to learn more about the contents? □Yes □No
4. Is the timeline easy to navigate? □Yes □No
5. How visually appealing is this project? ____________________________
   Not at all appealing  Not so appealing  Somewhat appealing  Very appealing  Extremely appealing
6. What are the words that come to your mind when you look at the design?
   ____________________________
7. What part do you most like about the project?
   ____________________________
8. What part do you most dislike about the project?
   ____________________________
9. Any other comments? ____________________________

Imagine RIT Feedback Survey
May 6, 2017
Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design? □Yes □No
2. Does this exhibition pique your interest in typography? □Yes □No
3. Do the illustrations attract you to learn more about the contents? □Yes □No
4. Is the timeline easy to navigate? □Yes □No
5. How visually appealing is this project? ____________________________
   Not at all appealing  Not so appealing  Somewhat appealing  Very appealing  Extremely appealing
6. What are the words that come to your mind when you look at the design?
   ____________________________
7. What part do you most like about the project?
   ____________________________
8. What part do you most dislike about the project?
   ____________________________
9. Any other comments? ____________________________
Appendix A. User Survey

Imagine RIT: Feedback Survey
May 5, 2017

Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design?  □ Yes  □ No
2. Does this exhibition pique your interest in typography?  □ Yes  □ No
3. Do the illustrations attract you to learn more about the contents?  □ Yes  □ No
4. Is the timeline easy to navigate?  □ Yes  □ No

5. How visually appealing is this project?

6. What are the words come to your mind when you look at the design?

7. What part do you most like about the project?

8. What part do you most dislike about the project?

9. Any other comments?

Imagine RIT: Feedback Survey
May 6, 2017

Evolution of Garamond
Yeseul Son

1. Do you have a professional/educational background related to design?  □ Yes  □ No
2. Does this exhibition pique your interest in typography?  □ Yes  □ No
3. Do the illustrations attract you to learn more about the contents?  □ Yes  □ No
4. Is the timeline easy to navigate?  □ Yes  □ No

5. How visually appealing is this project?

6. What are the words come to your mind when you look at the design?

7. What part do you most like about the project?

8. What part do you most dislike about the project?

9. Any other comments?
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Rochester, New York 14623
Fax: 585-475-6900

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Appendix C. Thesis Proposal

Evolution of a Typeface, Garamond
A Motion Graphic Piece with an Interactive Timeline

Thesis Proposal Submitted by
Yeseul Son
MFA Candidate

Rochester Institute of Technology
College of Imaging Arts and Sciences
Visual Communication Design
Spring 2016
Appendix C. Thesis Proposal

Thesis Proposal for the Master of Fine Arts Degree
Rochester Institute of Technology
College of Imaging Arts and Sciences
School of Design
Visual Communication Design

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Thesis Committee Approvals

Chief Advisor Daniel DeLuna
Associate Professor
Visual Communication Design

Date

Associate Advisor Nancy Ciolek
Associate Professor
Visual Communication Design

Date

Associate Advisor Lorrie Frear
Associate Professor
Graphic Design

Date
Appendix C. Thesis Proposal

Situation Analysis

People are exposed to typography in everyday life. “People are reading way more than they ever did, because on the Internet, it won’t lose any read. [...] You look at images, you look at videos, but most of time, you read,” said Erik Spiekermann, a German typographer and designer.\(^1\)

People’s everyday environment largely consists of typography. They use it, and live with it.

For visual communication design students, learning typography is fundamental. Learning typography can lead them to wiser design solutions, and give them more possibilities and sensitivities when they work. How a graphic designer manages typography can tell whether they are good graphic designers. Also, visual communication designers should have more professional expertise with typography. There are many people who do not have a design background but have some basic knowledge or exposure about some typefaces due to technological influences, such as font settings on their laptops or the Kindle typeface. With further knowledge of typography, designers can communicate with their customers and audiences better and provide them with more effective design solutions. Ultimately, well-designed typography by visual communication designers can enrich our daily life.

Typeface is one of the main elements in respect to the area of typography. Why are there innumerable typefaces out there? Why are many new typefaces being produced? What makes some typefaces
Appendix C. Thesis Proposal

less popular by not being used anymore, whereas some others endure for a long time. Why are some typefaces redesigned by different designers over a period of time, and why do some designers make their own versions of an existing typeface based on the original design? Understanding these aspects can help visual communication design students enhance their design skills, gain broader expertise, and have greater insights.

The typeface Garamond is a good example of a typeface that endures for a long time. It has a long history dating back to nearly 500 years ago. It was first made around mid-sixteenth century, and since then, it has born innumerable revivals, which were designed by many type designers and companies with different needs and backgrounds. Each revival has distinguishing characteristics and different purposes.

Due to its long history of revivals, studying the history of Garamond covers a variety of technologies for creating typefaces: foundry type, metal typesetting, monotype machine, phototype, and digital forms. For instance, Garamond No. 3 was first designed as a machine-set metal type, but later it was designed as a phototype, while nowadays it exists in a digital form.

Besides, Garamond has an interesting history to know. The original Garamond typeface was designed by Claude Garamond, a French punch-cutter and type designer. It was produced with the early type technology of making typefaces, punchcutting and metal types by hand. A mechanical metal movable-type was invented around mid-15th century by Johannes Gutenberg. This time period overlaps
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with the time when Old style typefaces were created, between the late 16th and mid-18th centuries. Claude Garamond, c.1480-1561, was an eminent designer of Old Style typefaces during the French Renaissance. "Claude Garamond, had long been regarded as one of the type designers par excellence of the century that followed Gutenberg's invention of movable type. Garamond the typeface is one of the most well-known Old Style typefaces.

Although many of the revivals of Garamond were designed based on Claude Garamond’s typeface, some of the revivals are actually based on Jean Jannon’s typeface, not Garamond’s typeface. Jean Jannon was a French type designer. He released a specimen of his typefaces in 1621, 60 years after Claude Garamond’s death, and the typefaces were mis-attributed to the typeface Garamond because of his typefaces’ similar characteristics with Garamond’s. This fact was found by Beatrice Warde, who was a woman, and she used her pen-name Paul Beaum, a man’s name, when she published her research of investigating Garamond.

Researching a typeface that has been for a long time revived, like Garamond, can require going through numerous resources and spending considerable time. However, it is worth studying a typeface’s evolution since it covers many aspects of typography. If there is a resource that covers from the first version of a typeface to the latest revival and that introduces information about each revival, it would be a lot easier to see through the whole history. Many of resources about Garamond typeface are from books, journals, or the Internet. They are
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widely spread. In addition, there are many resources that still exist in only books and print sources, which can’t be seen on the Internet.

Meanwhile, some resources show a huge amount of research in an engaging way to help their audience comprehend their contents easily and intuitively. For example, the website Color in Motion provides an interactive experience of color symbolism and color communication. It displays characteristics of each color by organizing the researched information on the website, which users can control, explore, and enjoy. This website includes motion clips for each color to tell each one’s story, as well as visually well-organized information. It is assuredly a more effective way to convey information of colors than showing the contents in a printed format, which had been a traditional way to present information about colors before this project published.

To convey the information about Garamond’s evolution and to pursue the aims of the thesis, this thesis will concentrate on building an interactive display that consists of a motion graphic with an interactive timeline so the audience can engage in the contents more effectively.
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Problem Statement

Can an interactive timeline displaying the Garamond from the original to the recent revivals help visual communication design students to comprehend a typeface’s evolution?
This project aims to pique visual communication design students’ interests in a typeface’s birth and evolution. Learning about Garamond’s parentage to its descendants, the audience will be familiar with various aspects of the typeface’s history, such as technology, designers, background, and most importantly, its transition of shape. By triggering their interests in evolution of a typeface, ultimately, this thesis expects to lead the audience to a self-study of typography to enhance their design skills and knowledge.

Can an interactive display demonstrating Garamond’s evolution be an effective way to deliver the contents composed of a long history to the audience?
There are increasing numbers of interactive displays as a way of presenting information. Exhibiting an interactive display can enable the audience to further engage in the contents and effectively cause user participation. In this way, audience can be even more easily grasp the contents about Garamond’s evolution than by reading a number of books and journals, or searching for numerous articles online.
Appendix C. Thesis Proposal

Survey of Literature

Typography

1 Typographic Design: Form and Communication, Wiley
   This book offers a great comprehension of what typography is, implying that typography is a portrayal of what an author wants to communicate and that it incorporates tone, state of mind, and story. This book outlines overall information about typography: the history, structure, technology, case studies, education, design process of typography. There are two interesting sections that are integrally related to the thesis topic: One is demonstrating the evolution of typography over the last thousands of years with a chronological diagram, and the other is depicting the evolution of typographic technology.

2 The Secret History of Letters Type
   The text tells interesting detailed stories of type itself. The Garamond section is especially useful since it presents the historical explanation of how and when Garamond’s revivals were created. Other main points associated with the topic of the thesis are found: punch-cutting, metal letters, and wooden type.

3 Meggs’ History of Graphic Design, 5th edition, Wiley
   This book is broadly well known in the visual communication field as it covers a gigantic range of the history with various specific examples. Since it carries a considerable amount of information of graphic design, many keywords were found in the index part: Garamond, Monotype Corporation, movable type, Old Style typeface, Phototype, and woodblock print. It conveys Garamond’s life and his contribution to typography at the time with historical context.
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Survey of Literature

Typography

4 Designing with Type: The Essential Guide to Typography

This book covers general but essential fundamentals of typography. Particularly it classifies 5 classic typefaces to represent each stage in the evolution of type design, one of which is Garamond, an Old Style typeface. It depicts the specific characteristics that Garamond's structure has. In addition, it shows actual applications of Garamond with different type sizes and line spacing to enable observation of legibility.

5 Thinking with Type: A Critical Guide for Designers, Writers, Editors & Students

The text introduces typography from a single letter to a text, and to a grid system. Although there are instructive parts throughout the book, it specifically talks about humanist types, and shows Garamond's revivals and each one's implication and purpose.

6 From Gutenberg to Opentype

The book portrays type from the earliest to the latest typefaces in chronological order. In the beginning, it includes Gutenberg's invention of movable type and Gothic blackletter to Roman type. Then it presents Garamond as a French Old face, and it introduces digital versions of Garamond as well. Besides, there are illustrations that depict how punch-cutting, Linotype machine and Monotype caster look like, which may be used as a visual element in the thesis.
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Survey of Literature

Typography

- My Life in Typefaces, Matthew Carter at TED 2014
  This is a speech in TED, a global set of conferences. The speaker is a type designer. Typefaces he designed include Verdana and Georgia the well-known digital typefaces. He shares his experience of designing typefaces over decades. It is especially interesting to listen about designing typefaces for display on binary screens.

- Anatomy of A typeface
  The text gives detailed historical explanation of Garamond typeface. It is one of the most helpful books for this thesis as it includes thorough description about Garamond. For instance, it introduces the principal purchasers of Garamond matrices, who were Christophe Plantin and Jacob Sabon, working together in a type foundry, and it also tells Sabon’s widow’s story. It is a great source for study of Garamond from the 16th-century’s to the 20th century.

- The Type Specimen of Jean Jannon
  The book was written by Beatrice Wars, a woman who found that many typefaces that were designed based on Garamond’s typeface were actually based on Jean Jannon’s design.
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Survey of Literature

**Typography**

10 An Exhibit of Garamond Type
This book introduces Garamond typeface and its brief history. In addition to that, it is enjoyable that it presents some appropriate ornaments to use with Garamond, like organic looking sophisticated illustrations, an arrangement of vine leaves, for instance.

11 Allan Haley on the Evolution of Typeface Design
In this interview, Allan Haley talked about his work and thoughts about making typefaces. He referred to his broad experience, one of which is that he worked for Monotype. He said a typeface is changed by designers over a long time, depending on needs like different medium for the type to be used in, and also depending on developments of technology. This is closely related to the thesis’ topic, which is a typeface that has endured for almost 500 years.

12 Wake up & Smell the Fonts
Sarah Hyndman, Wake up & Smell the Fonts, Speech, directed by TEDxBedford. 2014.
Sarah Hyndman is very convincing when saying that fonts have their own voices. One example of an experiment Sarah Hyndman showed to support the idea is that on a jellybean package, a rounded sans serif typeface, saying “eat me,” made the tasters feel like those jellybeans tasted sweeter than a jagged typeface did. It shows that a typeface choice on a package of jellybeans can make customers taste them differently, sweet or sour.
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Survey of Literature

Information Design

1 Infographics Designers’ Sketchbooks

This book presents eminent infographic designers’ sketches and final works. It is worth looking at the sketches as they reflect the designers’ thinking. Besides, many different solutions are shown in this book, and it can help brainstorm during the thesis to display information through a motion graphic.

2 Envisioning Information

This book was written by a pioneer of information design, Edward Tufte. He collected well-designed examples in terms of accuracy, efficiency, sophistication, or descriptiveness.

3 The Visual Display of Quantitative Information

The text attempts to guide audience on how to design information in an efficient way, considering practical aspects, such as ink, readability, and correctness. It is notable that the book shows how a graph can be simple as much as possible while being accurate.
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Survey of Literature

Motion Graphics

1. After Effects and Cinema 4D Lite
   Jackson, Chris, and Inc. ebrane. After effects and cinema 4D lite: 3D motion graphics and visual effects using CINEWARE. New York: Focal Press. 2014.
   The author illustrates the knowledge of Cinema 4D and After Effects with easy instruction and clear examples. In addition to After Effects, as the thesis may use 3D Modeling, learning Cinema 4D would be also helpful.

2. Creating Motion Graphics with After Effects
   This book includes a thorough guide to how to work in After Effects. Since After Effects has many features and functions, it can be difficult and confusing sometimes when working. It is especially useful to see a number of detailed explanations and tips in this book. It can be a great guidance on the implementation stage of the thesis.

3. Type on Screen
   The text specifically examines how using type on screen has developed, and gives a practical comprehension of how type can be applied on screen. Examples shown in the last chapter, particularly, are what it can help during the thesis process as the thesis works with type in a motion graphic, which is on screen.
Appendices

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Survey of Literature

<table>
<thead>
<tr>
<th>Motion Graphics</th>
<th>4. The Visual Story: Creating the Visual Structure of Film</th>
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This book portrays the foundation of visual structure in movie sources, from fundamental visual elements and movements to color, sound, and story. The last chapter, How to Use the Basic Knowledge of Visual Structure Displayed in the Previous Sections, can guide the thesis once it needs to outline a storyboard.
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Design Ideation

Audience Persona  Primary Persona

Jenna Heather
23 years old

Jenna is a graduate student studying graphic design, in Rochester, New York. Her undergraduate major was interior design, so she started to learn typography from her graduate studies. Since typography is an important part in her design works, she wants to study typography more deeply; however, there are too many resources, so sometimes she is overwhelmed.

Exploring other people’s design work is her huge interest. She enjoys visiting art and design museums whenever traveling to other cities. She usually visits university galleries around her as well as portfolio websites like Vimeo or Behance.
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Design Ideation

<table>
<thead>
<tr>
<th>Audience Persona</th>
<th>Secondary Persona</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tim Lee</td>
</tr>
</tbody>
</table>

Tim Lee
29 years old

Tim is working for a sign design company that deals with all parts of designing a sign system. He majored in industrial design in his undergraduate years, and now is in the planning team of the company. Communicating with his team members sometimes requires him to gain knowledge of graphic design. He researches and studies graphic design from different sources on the Internet or in books. Studying typography, in particular, enhances his interpretation of his team members’ thinking, some of who are graphic designers, when the team determines a typeface for a sign design.
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Design Ideation

Type: An Interactive Installation based on motion graphics clips

Environment: The exhibition can be installed in places like College galleries, museum exhibitions, gallery cafe or coffee shops, design conferences, Vignelli Center, Cooper Hewitt Smithsonian Design museum, RISD museum, Student exhibitions, Cary Collection at FIT.

Design Components: There are two main components. First, motion graphics clips showing the evolution of Garamond, in terms of its shapes, technology, and designers. Second, a prototype showing how the motion graphic about Garamond is composed with an interactive timeline and installed for an exhibition environment.
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Design Ideation

Many concepts of the timeline were come up with by making sketches. The best sketch presented is likely to be chosen for the project.

Sketch 1

Sketch 2
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Design Ideation

Sketch 3
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Design Ideation

Sketch 4
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Design Ideation

Sketch 5
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Design Ideation

Sketch 6

Sketch 7
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Design Ideation

Sketch II

This sketch illustrates the idea of repeating a creation of each revival of Garamond. Between each revival, some visual information is shown like designer and technology. In this way, the timeline can show the transition between each Garamond’s design when the timeline is dragged, and also introduce other information effectively.
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Methodological Design

1 Research on Garamond's History and Collect Sources
   To specify the topic of the thesis, a wide range of research of
   Garamond has been done. After figuring out the specific topic,
   research of Garamond's original to its revivals has been conducted.
   During the research, it was found that there are 3 big categories
   regarding to the revivals: letterforms, technology, and designers. To
   focus on finding out the information about those aspects of each
   revival, more thorough research has been carried out. The research
   will be the story of the motion graphic in the project, arranged in
   chronological order.

2 A Flowchart and a Wireframe, and a Storyboard
   A flowchart and a wireframe are needed to design the timeline. Also, a
   storyboard is needed for the motion graphic.

3 Determine a Visual Style
   A visual style is designed for the timeline and motion graphic, in a
   consistent way.

4 Make the Motion Graphic
   Start to make the motion graphic that is a prototype showing how
   the interactive timeline works and the contents of the timeline.
   Background music or sound effects can be added. A software, like
   Invision, may be used to simulate the interface.

5 Build a Prototype of the Exhibition
   To show the idea of exhibition where the timeline is installed, images
   of still frames or a short motion graphic is made.
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Methodological Design

6 Evaluation of the Final Work
   Evaluations are important as the work of the thesis is user-centric.
   Feedbacks are gathered from colleagues, committee members, and
   advisors from RIT Cary Collection professionals.

7 Revisions Based on Feedbacks
   Revisions are carried out based on the feedbacks to polish the work.

8 Final Presentation and Dissemination
   Give the final presentation and disseminate the thesis work outside
   the department.
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Deliverables

A Motion Prototype of an Interactive Display Showing the Evolution of Garamond
A prototype of an interactive user interface will be made and shown in a motion graphic. The prototype will demonstrate how the interactive display introducing the evolution of Garamond looks and works.

Images as a Prototype to Show How the Interactive Timeline is installed and exhibited in a real environment
Images showing how the interactive timeline is installed in an exhibition will be designed.
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Implementation Strategies

This thesis requires a great amount of research about Garamond’s revivals and knowledge of typography. Also, to do the graphic design and motion graphic design part of the thesis, the softwares listed below can be used.

Softwares

- Autodesk Maya, and Mudbox
- Maxon Cinema 4D
- Invision
Appendices

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Dissemination

To promote the thesis, contents of the thesis will be uploaded on a personal thesis blog. In addition, the thesis will be participated in VCD thesis show and Imagine RIT show. Besides, it can participate in various related design competitions.

Personal
- Thesis blog
- Behance & Vimeo Account
- Personal Portfolio Website

RIT
- Imagine RIT 2016
- VCD Thesis Show 2016

Design Awards
- Adobe Design Achievement Awards
- HOW Interactive Design Awards
- Interaction Awards
- AIGA Awards
- A Design Award and Competition
- Communication Arts Awards
- Pixel Awards
- Red Dot Communication Design 2016
### Evaluation Plan

Evaluation is an essential part of the thesis to see if the audience successfully understands the contents and if the goals of the thesis are achieved well. The evaluation plan includes feedbacks from instructors, peers, target audience, and the type history expert(s) at the Cary Collection. Furthermore, there will be a survey with such scoring methods for audience to participate in, after watching the thesis work.

<table>
<thead>
<tr>
<th><strong>Feedbacks</strong></th>
<th>From instructors</th>
<th>From peers</th>
<th>From the target audience</th>
<th>From type history expert(s) at the Cary Collection</th>
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<tr>
<td><strong>Success Criteria</strong></td>
<td>Understanding the contents</td>
<td>Understanding about Garamond</td>
<td>Feeling the knowledge is helpful</td>
<td>Interest level</td>
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<tr>
<td></td>
<td>Raising interests in typography</td>
<td>Raising interests in a typeface's evolution</td>
<td>Being helpful for future study of typography</td>
<td></td>
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</tbody>
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Implications

Leading Visual Communication Design Students to Better Understanding of Typography
It helps visual communication design students to have further comprehension of typography and a typeface’s evolution by introducing various aspects like designer, technology, and how the typeface’s design has changed.

Piquing the Audience’s Interest in Typography and a Typeface’s Evolution
One main goal of the thesis is to raise visual communication design students’ interests in how a typeface has revived. By a typeface’s story, they can learn several aspects involved in a typeface’s revivals.

Helping the Audience’s Self-study of Typography for the Improvement of Design Skills and Knowledges
In addition to triggering interests, the thesis ultimately expects to help the audience enhance their knowledge about typography and to lead them to further study of typography on their own initiative.
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### Pragmatic Considerations

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<td>Competition Entrance Fee</td>
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<tr>
<td>Thesis Website and Domain Fee</td>
<td>$35</td>
</tr>
</tbody>
</table>
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Bibliography

Information
1. Putting Back the Face into Typeface
   Erik Spekermann, Documentary, directed by
   Gestalten TV (Feb 1, 2011)

2. The Secret History of Letters

Images
LUXEMBOURG 2016
www.behance.net/gallery/94112169/LUXEMBOURG-2016

Color in Motion
www.maraclausacortes.com

FFMark
www.ffmark.com

Universal Typeface
www.thenunderlaytypeface.com

Volkswagen Electric
volkswagen-electrique.fr/e-golfassistance